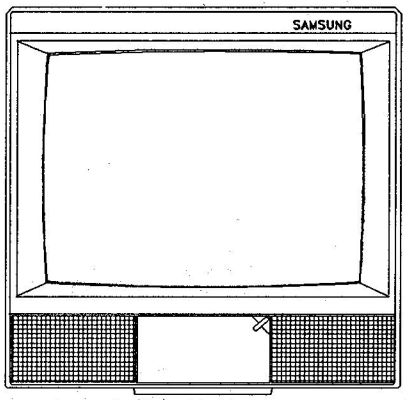
SAMSUNG Electronics

SERVICE MANUAL

MODEL: CX5913W
CHASSIS: 25P-88MT (MTTS2)

COLOUR TELEVISION RECEIVER



CX5913W

SPECIFICATION

Television System	PAL - B/G , SECAM-B/G
Receiving Channel	VHF : 2 - 12 , CATV : S1 -S20 UHF : 21 - 69
Intermediate Frequency	Picture I-F Frequency : 38.9MHz Sound 1 I-F Carrier Frequency : 33.4MHz Sound 2 I-F Carrier Frequency : 33.16MHz Pilot Carrier Frequency : 54.6873KHz Colour Sub-carrier Frequency : 34.47MHz
Picture Tube	A59EAK01X01
Power Requirements	160 - 260V , 50Hz
Power Consumption	125 WATT
Speaker	Impedance : 8 Ohm , 10W + 10W
Features	25P88MT & RM104 REMOCON SYSTEM

SAFETY CAUTION :

Before servicing this chassis, it is important that a service technician reads and follows the "Safety Precaution" and "Product Safety Notice" in this Service Manual.

* For continued X-radiation, replaced the picture tube with original type.
* Design and specifications are subject to change without prior notice.
* WARNING-SHOCK HAZARD - use isolation transformer when servicing.

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SAFETY INSTRUCTIONS

WARNING : BEFORE SERVICING THIS CHASSIS, READ THE "X-RADIATION PRECAUTION", "SAFETY PRECAUTION", "PRODUCT SAFETY NOTICE" AND "SERVICE NOTICES" DESCRIBED BELOW.

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often unnoticed in the process of vidual inspection and the protection afforded by many electrical and mechanical parts cannot necessarily be obtined by using replacement components rated for higher voltage, wattage and etc. The replacement parts which have these special safety characteristics are identified in this manual and its supplements ; electrical components having such features are identified. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create a shock, dire, X-radiation or other hazards.

SERVICE NOTES

1. When replacing parts or circuit boards, clamp the lead wires to the terminals befores soldering.
2. When replacing a high wattage resistor (oxide metal film resistor) in the circuit board, keep the resistor 10mm (1/2 in.) away from the circuit board.
3. Keep the wires away from high voltage or high temperature components.
4. If any Fuse in this TV receiver is blown, replace it with the FUSE specified in the chassis parts list.

X-RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The normal value of the high voltage of this receiver is 28KV at zero beam current (minimum brightness). The high voltage must not, under any circumstances, exceed 28.5KV. Whenever a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure in this manual. It is recommended that the reading of the high voltage should be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.
2. The only source of X-RADIATION on this TV receiver is the picture tube. For continued X-RADIATION protection, the replacement tube must be exactly the same type as specified in the parts list.
3. Some parts in this receiver have specially safety-related charateristics for X-RADIATION protection. For continued safety, the parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE.

SAFETY PRECAUTION

WARNING : The service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver. The following are the necessary precautions to be observed before servicing.

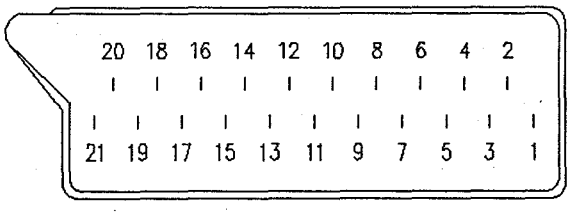
Since the chassis of this receiver is directly connected to the AC power line – (Hot chassis), an isolation transformer should be used during any dynamic service to avoid the possible shock hazards.

1. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use the shatterproof goggles and keep the picture tube away from the bare body while handling.
2. When replacing a chassis in the cabinet, be always certain that all the protective devices are put back in place, such as : non-metallic control knobs, in-suating covers, shields, isolation resistor-capacitor network and etc.
3. Before returning the set to the customer, always pre-check the AC leakage current on the exposed metallic parts of the cabinet, such as antennas, terminals, screwheards, metal overalays, control shafts and etc. To be sure, the set is safe to operate without danger of electrical shock. Plug the AC line cord directly into a AC outlet (do not use a line isolation transformer during this check). Use an AC voltmeter having 5000 ohm per volt or more sensitivity in the following manner. Connect a 1500 ohm 10 watt resistor, paralleled by a 0.15uf, AC type capacitor, between a good earth ground (water pipe, conduit etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 ohm resistor and 0.15uF capacitor. Reverse the AC plug at the AC outlet and repeat the AC voltage measurements for each exposed metallic part. The voltage measured must not exceed 0.3 volts RMS. This corresponds to 0.2 milliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

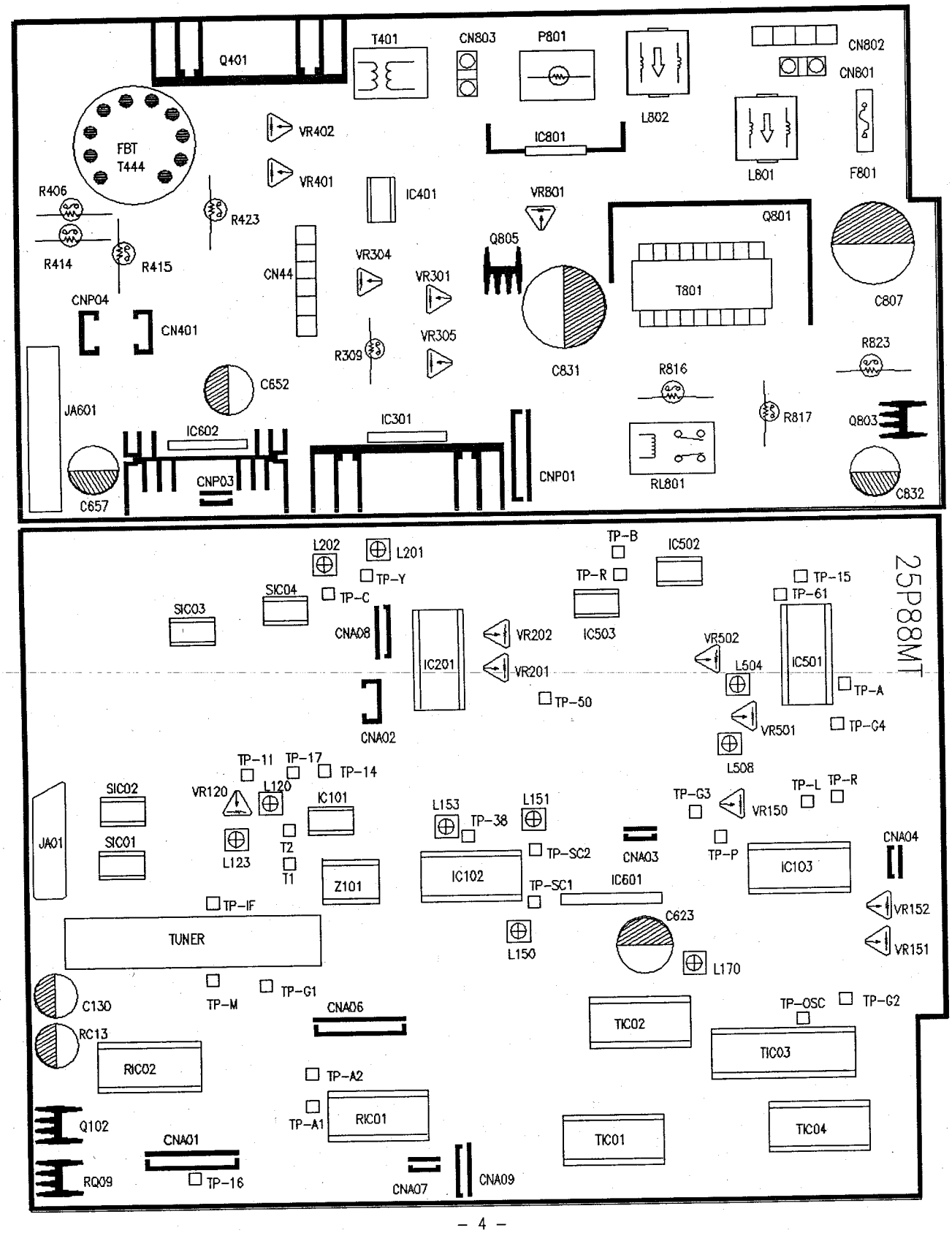
PIN CONNECTION OF EURO-AV SOCKET

If you wish to connect peripheral equipment to your TV set, your dealer will be able to make the standard correct using the table below.

PIN	CONNECTION	PIN	CONNECTION
1	Audio output R	12	---
2	Audio input R	13	Red earth
3	Audio output L	14	---
4	Audio earth	15	Red input
5	Blue earth	16	Status RGB (fast blanking)
6	Audio input L	17	CVBS earth
7	Blue input	18	RGB status earth
8	Status CVBS	19	CVBS output
9	Green earth	20	CVBS input
10	---	21	Socket earth
11	Green input		



PART LOCATION DIAGRAM



INSTALLATION AND SERVICE ADJUSTMENTS

1. GENERAL INFORMATIONS

All the adjustments are thoroughly checked and corrected when the receiver leaves the factory. Therefore the receiver should operate normally and produce proper colours and B/W picture upon installation. However, the minor service adjustments may be required depending on the particular location in which the receiver is operated. This receiver is shipped completely in carboard carton. Carefully draw out the carton and remove all the packing materials.

Plug the power cord into a convenient two pin power outlet. Turn the receiver ON and adjust the fine tuning for the best picture detail.

Check and adjust all the customer controls such as BRIGHTNESS, CONTRAST and COLOUR Controls to obtain natural colours or B/W picture.

2. AUTOMATIC DEGAUSSING

A degaussing coil is mounted around the picture tube so that the extenal degaussing after moving the receiver is normally unnecessary, providing the receiver is properly degaussed upon installation. The degaussing coil operates for about 1 second after the power to the receiver is switched ON. If the set is moved or faced in a different direction, the power switch must be switched off at least 10 minutes in order that the automatic degaussing circuit operates properly.

If the chassis or parts of the cabinet becomes magnetized and cause the poor colour purity, use an external degaussing coil. Slowly move the degaussing coil around the face-plate of the picture tube, the sides and the rear of the receiver and slowly withdraw the coil to the distance of about 2m before disconnecting it from the AC source. If the colour shading still persists, perform the COLOUR PURITY ADJUSTMENT and CONVERGENCE ADJUSTMENTS procedures, as mentioned later.

3. HIGH VOLTAGE CHECK

CAUTION : There is no HIGH VOLTAGE ADJUSTMENT on this chassis. But B+ power must be adjusted in +155V under the full colour bar pattern and normal picture control level.

1) Connect an accurate high voltage meter to the second anode of the picture tube.
2) Turn on the receiver. Set the BRIGHTNESS and CONTRAST control to the minimum (zero beam).
3) The high voltage should be measured less than 28.5KV.
4) Rotate the BRIGHTNESS and CONTRAST controls to the both extremes to be sure the high voltage does not exceed the 28.5KV limit nuder any conditions.

4. HORIZONTAL OSCILLATOR ADJUSTMENT

If there is an indication of unstable horizontal sync, adjust the HORIZONTAL HOLD control (VR401) to remove the condition. When you adjust the Horizontal Hold control, you should connect TPHG and TPG1 for the H-oscillator adjustment.

5. HORIZONTAL PHASE ADJUSTMENT

If you want to move the center of picture, adjust HORIZONTAL phase control (VR402).

6. VERTICAL HEIGHT ADJUSTMENT

The SIZE control(VR301) on the power board changes the size of the picture, having an equal effect on the top and the buttom.

7. BARREL ADJUSTMENT

The side pincushion control(VR305) on the power board changes the side pincushion of the picture.

8. HORIZONTAL SIZE ADJUSTMENT

The horizontal size control(VR304) on the power board changes the horizontal size of the picture.

9. SCREEN ADJUSTMENT

1) Tune in an active channel.
2) Make the picture be normal condition(no blooming or no-flyback line) with the VR screen.

10. FOCUS ADJUSTMENT

Adjust the FOCUS control on FBT for well defined scanning lines in the center area of the screen.

11. R-F AGC ADJUSTMENT

1) Tune the set in the strongest station in your area.
2) Turn the AGC control (VR120) on the IF board to fully clockwise position.
3) Adjust the AGC control until the noises(snow) dissappear from the screen.

12. APC ADJUSTMENT

1) Receive the colour bar pattern.
2) Connect TP-A to TP-G4 with jumper.
3) Control the Trimer VC501 on the main PCB to get the colour.

13. COLOUR PURITY ADJUSTMENT

NOTE : Before attempting any purity adjustments, the receiver should be operated for at least fifteen minutes. Purity adjustment requires Rubber Wedge kit.

1) Demagnetize the picture tube and cabinet using a degaussing coil.
2) Turn the CONTRAST and BRIGHTNESS controls to the maximum.

3) Receiver the green colour pattern.
4) Loosen the clamp crew holding the yoke, and slide the yoke backward or forward to provide vertical green belt (zone) in the picture screen.
5) Remote the Rubber Wedges.
6) Rotate and spread the tabs of the purity magnet (See Fig. 3) around the neck of the picture tube until a green belt is obtained in the center of the screen.
7) Move the yoke slowly forward or backward until a uniform red screen is obtained. Tighten the clamp screw.
8) Check the purity of the red and blue rasters.
9) Tighten the clamp screw of the yoke temporarily.
10) Obtain a white raster ; referring to the "CRT WHITE BLANCE ADJUSTMENT".
11) Proceed with convergence adjustment.

14. CRT WHITE BALANCE ADJUSTMENT

1) Tune in an active channel.
2) Set the colour control to the minimum.
3) By rotations the RED and blue drive controls (VR201, VR202) clockwise from the minimum, set them to the mid-position.
4) Adjust the Blue and Red drive controls(VR201,VR202) to obtain proper white-balanced picture in a high area.

15. CONVERGENCE ADJUSTMENT

NOTE : Before attempting any convergence adjustment, the receiver should be operated for at least fifteen minutes.

Centre Convergence Adjustment

1) Receive the crosshatch pattern with a colour bar signal generator.
2) Adjust the BRIGHTNESS and CONTRAST Controls for a well defined pattern.
3) Adjust the two tabs of the 4-pole Magnets to change the angle between them (See Fig. 2) and superimpose the red and blue vertical lines in the centre area of the picture screen (See Fig. 2).
4) Turn the both taps while at the same time keeping the angle constant and superimpose the red and blue horizontal lines at the center of the screen (See Fig. 3).
5) Adjust the two tabs of 6-pole Magnets to superimpose the red/blue line and green one. Adjusting the angle affects the vertical lines and rotating both magnets affect the horizontal lines.
6) Due to the interaction between these adjustments the steps 3,4 and 5 should be repeated until the satisfactory results are obtained.

CIRCUMFERENCE CONVERGENCE ADJUSTMENT

1) Loosen the clamping screw of deflection yoke to allow the yoke to tilt.
2) Put a wedge as shown in Fig. 1 temporarily (Do not remove the cover paper on adeshive part of the wedge).
3) Tilt the front of the deflection yoke up or down to obtain better convergence in circumference (See Fig.3). Push the mounted wedge into the space between the picture tube and the yoke to fix the yoke temporarily.
4) Put the other wedge into bottom space and remove the cover paper to stick.
5) Tilt the front of the yoke right or left to obtain the convergence in circumference (See Fig. 4).
6) Keep the yoke position and put another wedge in either upper space. Remove the conver paper and stick the wedge on picture tube to fix the yoke.
7) Datach the temporarily mounted wedge and put it in another upper space. Stick it on picture tube to fix the yoke.
8) Afer fixing three wedges, recheck overall convergence. Tighten the screw firmly to fix the yoke and check if the yoke is firm.
9) Stick 3 adeshive tabs on the wedges as shown in Fig. 1.

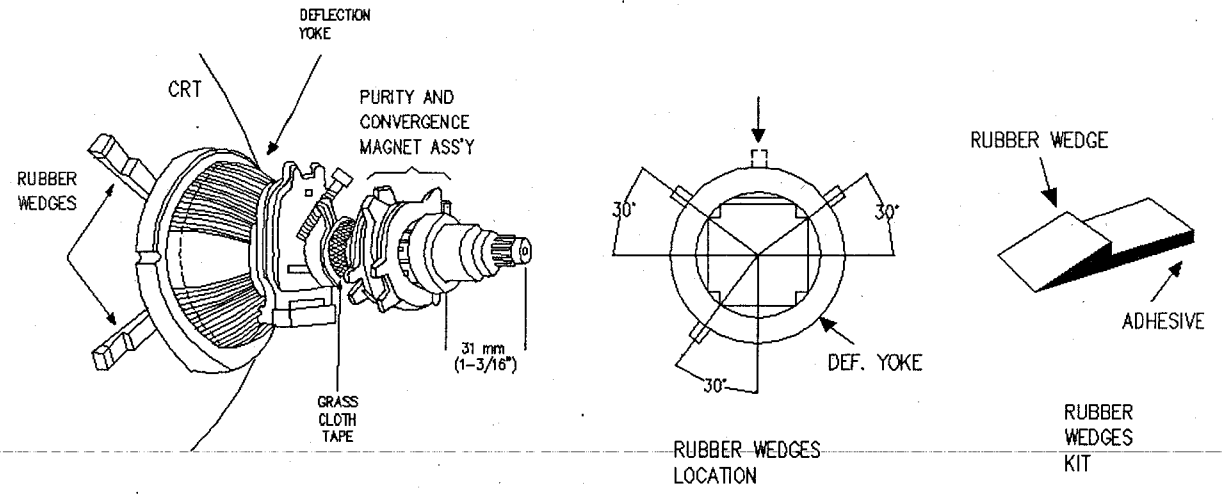


Figure 1 TUBE ASSMEBLY

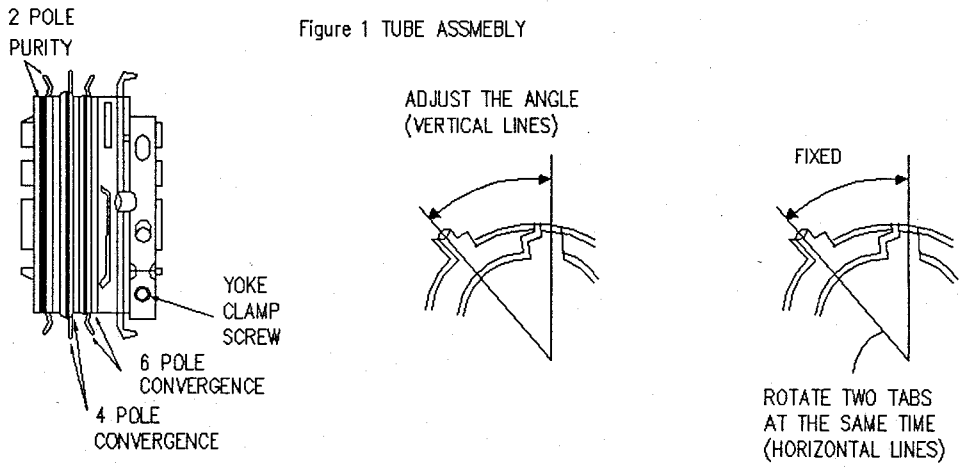
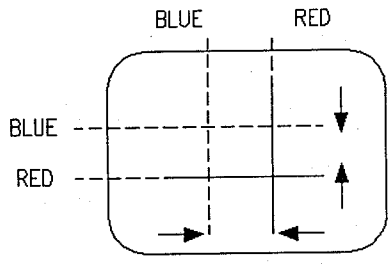
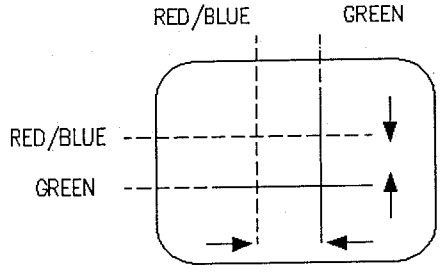


Figure 2 PURITY AND CONVERGENCE MAGNETS

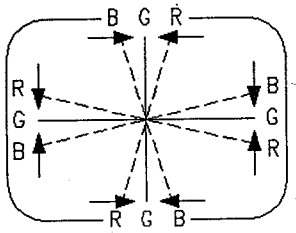


4–POLE MAGNETS MOVEMENT

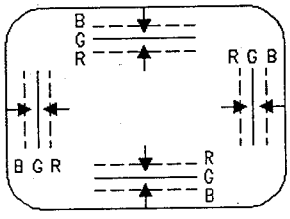


6–POLE MAGNETS MOVEMENT

Centre Convergence by Convergence Magnets



INCLINE THE YOKE UP (OR DOWN)



INCLINE THE YOKE RIGHT (OR LEFT)

Circumference Convergence by DEF. Yoke

GENERAL ALIGNMENT INSTRUCTIONS

A. GENERAL

The alignment is an exacting procedure and should be undertaken only when necessary.
The test equipment specified or its equivalent is required to properly perform the alignment procedures which are outlined on the following pages. The use of equipment which does not meet these requirements may result in the inability of proper aligning in the receiver.
It is essential that bias values as specified are maintained, while the alignment insures the proper results.

B. EQUIPMENT TERMINATIONS

The alignment pads are designed for correct matching of the equipment to the circuits involved. The failue to the proper matching will result in the responses which cannot be depended upon as representing the ture operation of the receiver. The pads should be constructed as compactly as possible with all the unshielded leads not being in excess of 2.5cm long.

C. SIGNAL OVERLOAD

Since the large excessive of the sweep generator causes the overloading of receiver circuits, first, the output of the sweep generator set to zero and then gradually increase the output until a response is obtained. Further, increase of the sweep output should not change the configuration of the response except in amplitude. If the response changes in configuration, for example, flattening at the top or dropping below the base line at the botton, decrease the sweep output to restore the proper configuration. The oscilloscope gain should be as high as possible to maintain the useable pattern with peak-to-peak values specified, thus requiring a lower output from the sweep generator and less change of overload.
The insertion of markers from the marker generator should not cause the distortion of the response.

D. TEST EQUIPMENTS

1) PAL/SECAM PATTERN GENERATOR (PM5518)
2) OSCILLOSCOPE
3) DC power supply (DC range : 0–10V, 0–20V)
4) Matching pad
5) Probe (which impedance is 75 ohm)
6) TV MULTI SOUND GENERATOR
7) BNC TO DIN JACK
8) BNC TO BNC CABLE
9) DIGITAL VOLTMETER

1. VIDEO DETECTOR ALIGNMENT

1.1 Setting

1.1.1 PM5518 : Crosshatch pattern of 38.9MHz.
1.1.2 Dc power supply : 16.5V
1.1.3 Oscilloscope : 50mV/DIV, 0.5uSEC/DIV, 10:1 probe.

1.2 Preparation

1.2.1. Connect the DC power supply probe to TP-16 of the main PCB.
1.2.2 Connect the RF out of the PM5518 with the direct probe to TP-IF.
1.2.3 Connect the 10:1 probe of oscilloscope to TP-11.

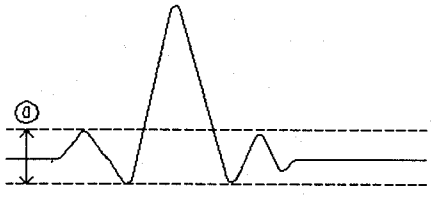


Figure 4 2T PULSE

1.3 STEPS

1.3.1 Adjust the VIDEO DET. coil (L123) to equalize the ⓐ level.

2. AFT ADJUSTMENT

2.1 Setting

2.1.1 PM5518 : Crosshatch pattern of 38.9MHz.
2.1.2 DC power supply : 16.5V
2.1.3 Digital voltmeter : 10V range

2.2 Preparation

2.2.1 Connect the DC power supply probe to TP-16 of the main PCB.
2.2.2 Connect the digital voltmeter probe to TP-17 of the main PCB.
2.2.3 Connect the RF out of the PM5518 with the direct probe to the IF pin of the tuner.

2.3 STEPS

2.3.1 Adjust the L120 until the digital voltmeter is to be 6V.

3. GROUP DELAY ALIGNMENT

1) Receive the crosshatch pattern of 217.25MHz with the PAL pattern generator.
2) Set the signal gain of the pattern generator to be maximum (about 75 - 85dBuV).
3) Connect the oscilloscope probe (using 10:1 probe) to TP-11.
4) Adjust the upper core of tuner so that the amplitude of multi-burst signal is flat (See Fig. 5).

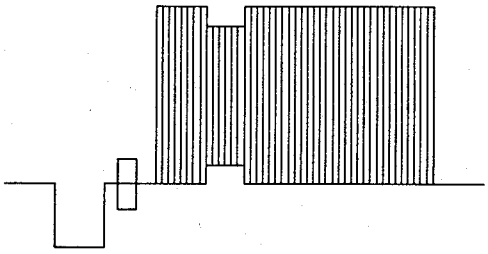


Figure 5

4. APC ADJUSTMENT

1) Receive the colour bar pattern with PAL colour bar generator.
2) Connect the terminal TP-A to the terminal TP-G4 with the short jumper wire.
3) Adjust the APC control (VC501) so that the colour bar pattern stands still vertically or drifts slowly across the picture screen (See Fig. 6).
4) Remove the short jumper wire.
5) Check that the colour apperars with in 0.5sec when changing the channel to another.
   If the colour appears slowly or the colour sync. is not normal, retouch colour sync. Trimmer (VC501) for the proper colour display.

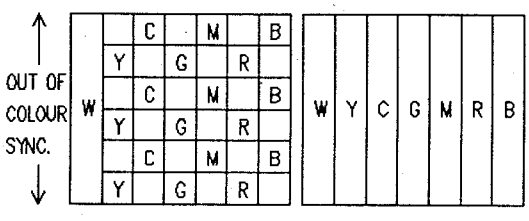


Figure 6

5.CHROMA TRAP ADJUSTMENT

1) Receive Red pattern of the PAL pattern generator.
2) Connect the oscilloscope to TP-c.
3) Adjust L202 until the amplitude A of the Red signal is minimum (See Fig. 7).

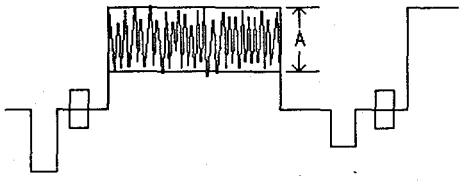


Figure 7

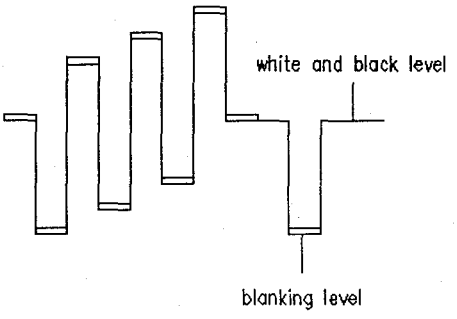


Figure 8-1

6. R-Y, B-Y Demodulation Adjustment

1) Receive the SECAM colour bar signals.
2) Set the Colour, Brightness, Contrast controls to the Max position.
3) Set the VR501 to the center condition.
4) Connect the oscilloscope probe to terminal TP-51.
5) Adjust L504 such that the level of the black and white are in accordance with the blanking level (See Fig. 8-1).
6) Then change the oscilloscope probe to terminal TP-61.
7) Adjust VR501 such that the level of the blank and white are in accordance with the blanking level (See Fig. 8-2).

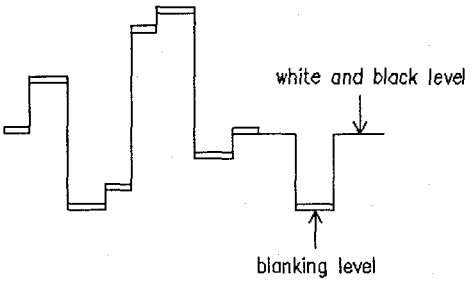


Figure 8-2

7. BELL FILTER ADJUSTMENT

1) Receive the SECAM colour bar signals.
2) Connect the oscilloscope probe to the terminal TP-15.
3) Adjust L508 for the flat level of amplitude in each colour bar wareform on the scope (See Fig. 9).

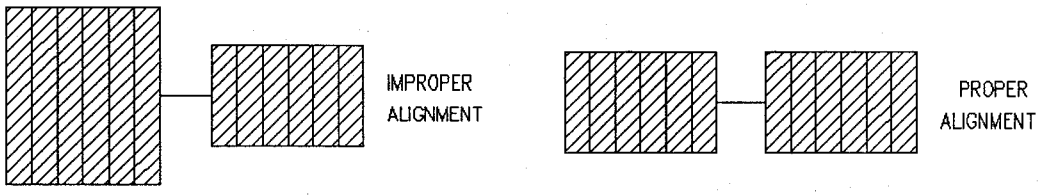


Figure 9

MULTI SOUND ADJUSTMENT

1) Connect the Video out on PAL PATTERN GENERATOR to the Video on the TV-Multi-SOUND GENERATOR with BNC to BNC cable.
2) Connect the RF output on the TV Multi-SOUND GENERATOR to the antenna input on the TV set with BNG to DIN jack.
3) Since only R sound signal with pilot carrier should be transmitterd, select not (R+L)/2, L or DUAL, but R with pilot carrier signal and set the stereo mode.

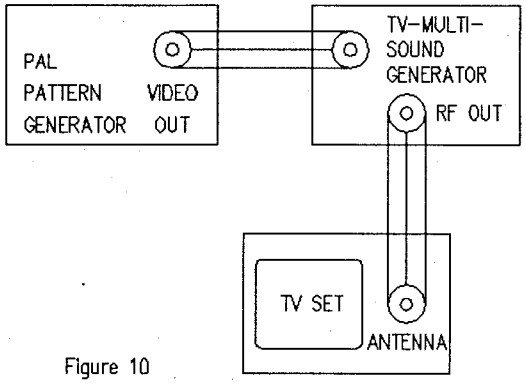


Figure 10

1. SIF DETECTOR ADJUSTMENT

1) Receive the colour bar signal and STEREO SOUND by Fig. 10.
2) Connect the oscilloscope probe to the terminal TP-38.
3) Adust L153 until the amplitude A of the colour bar signal is minimum (See Fig. 11).

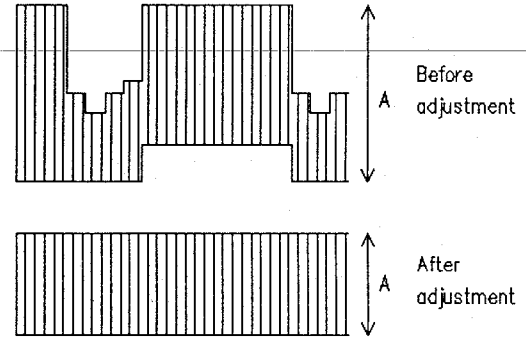


Figure 11

2. SC1, SC2 DETECTOR ADJUSTMENT

1) Receive the colour bar signal and stereo sound.
2) Connect the oscillscope probe to the terminal TP-SC1.
3) Adjust L150 until the amplitude A becomes maximum.
4) And, connect the oscilloscope probe to the terminal TP-SC2.
5) Adjust L151 until the amplitude A becomes maximum (See Fig. 13).

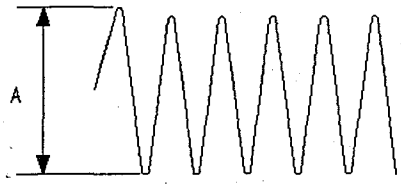


Figure 13

3. PILOT DETECTOR ADJUSTMENT

1) Receive the colour bar signal and stereo sound.
2) Connect the oscilloscope probe to the terminal TP-P.
3) Adjust L170 until the amplitude A of pilot warform is proper (See Fig. 14).

(Before) Adjustment (After) Adjustment

Figure 14

4. STEREO IDENT ADJUSTMENT

1) Receive the colour bar signal and stereo sound.
2) Connect the oscilloscope probe to the terminal TP-PS.
3) Adjust VR151 until the amplitude A of Fig. 15 becomes maximum.

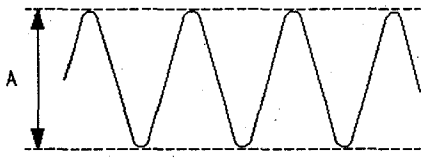


Figure 15

5. DUAL IDENT ADJUSTMENT

1) Receive the colour bar signal and dual sound.
2) Connect the oscilloscope probe to the terminal TP-PD.
3) Adjust VR152 until the amplitude A of Fig. 16 becomes maximum.

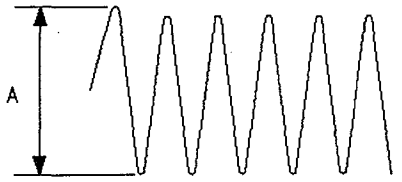
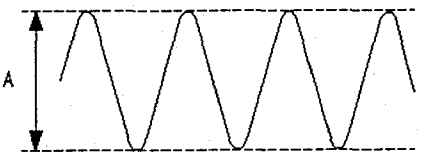


Figure 16

6. SOUND SEPERATION ADJUSTMENT

1) Receive the colour bar signal and stereo sound.
2) Connect the oscilloscope probe to the terminal TP-L.
3) Connect the oscilloscope probe to the terminal TP-R.
4) Adjust VR150 to be no distortion of R,L signal (See Fig. 17).

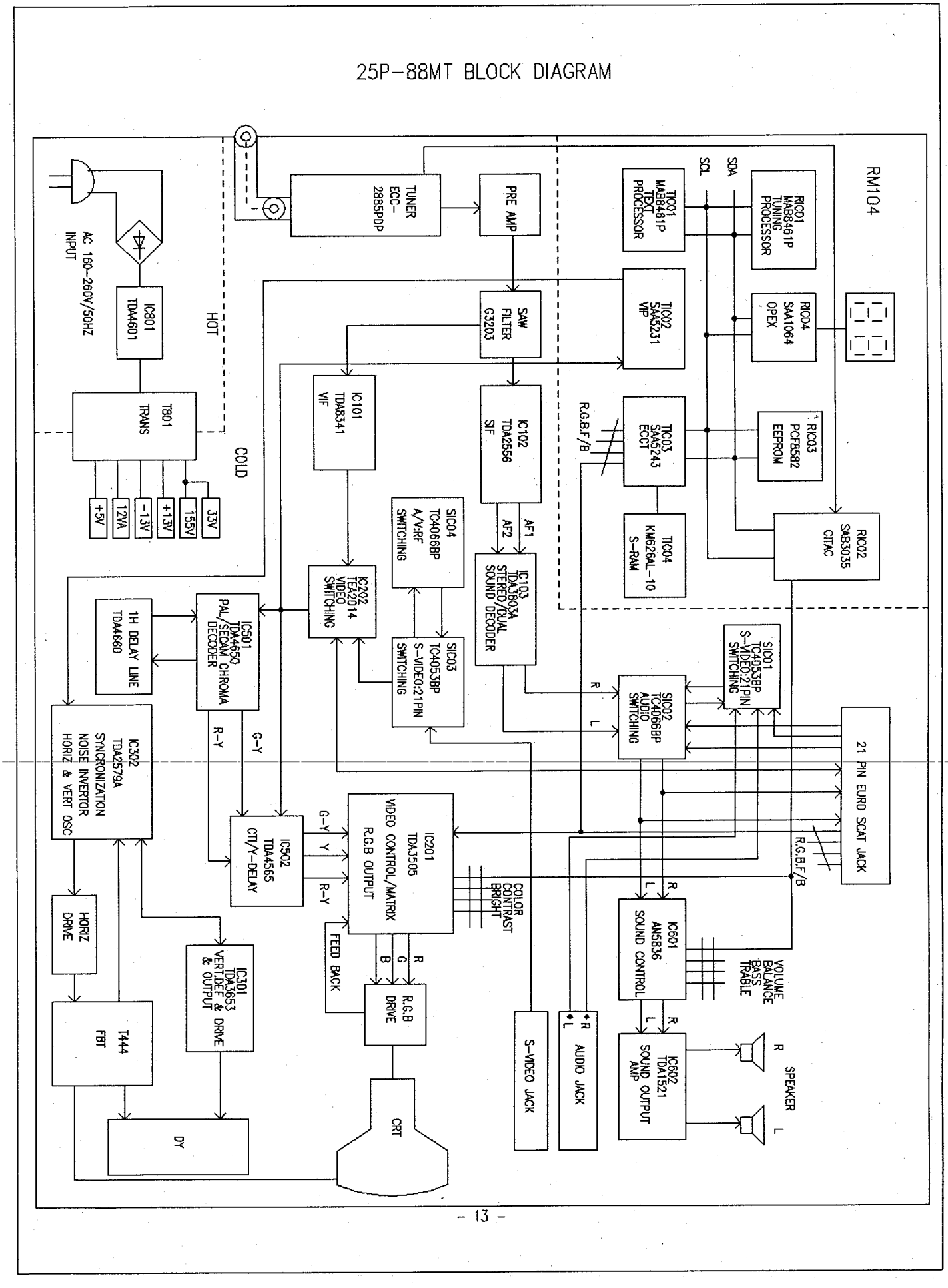
Before Adjustment



After Adjustment

Figure 17

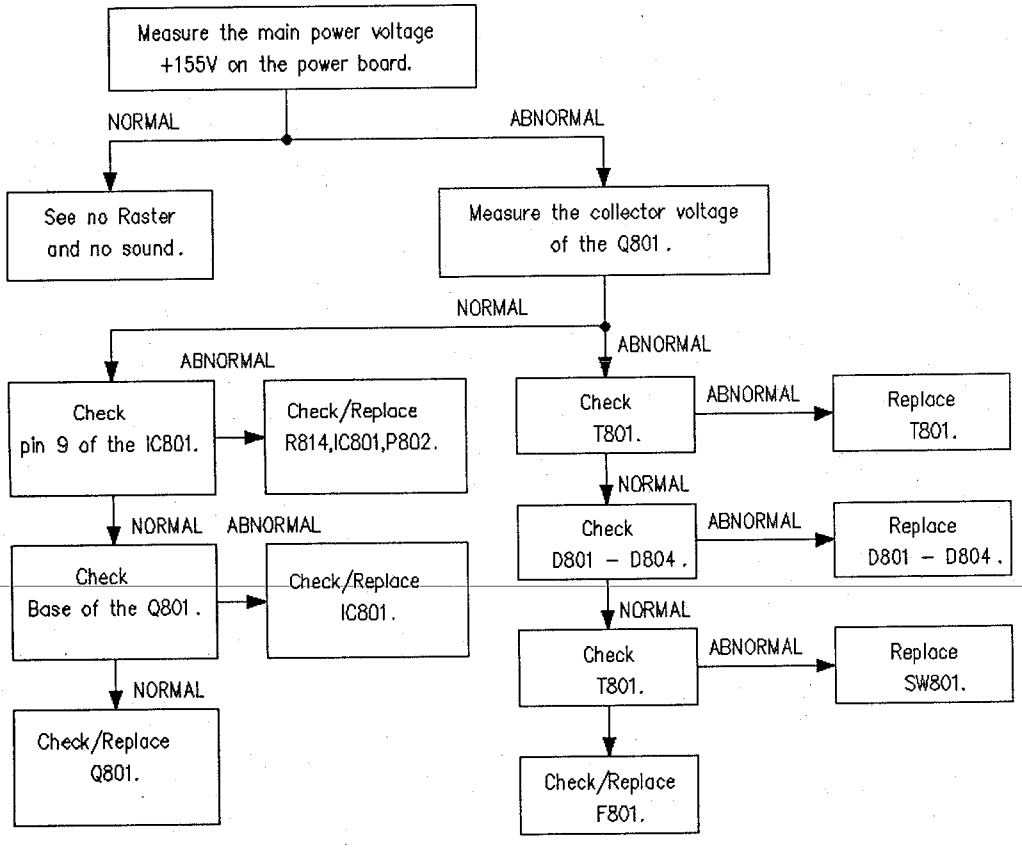
25P-88MT BLOCK DIAGRAM



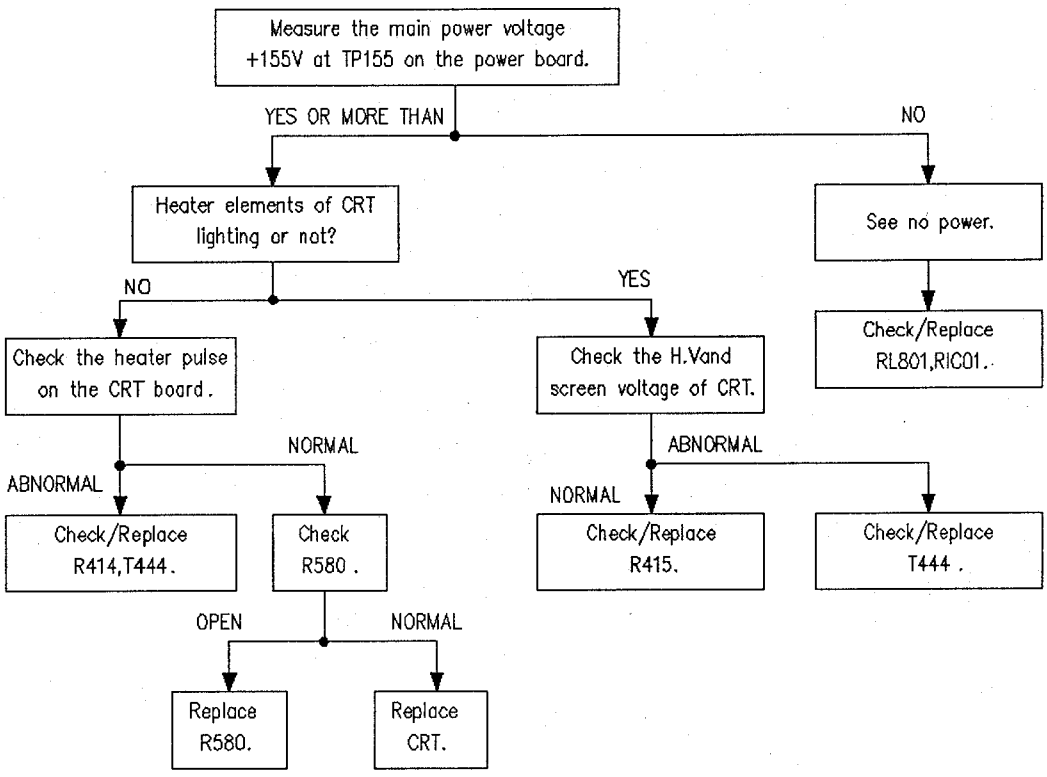
TROUBLESHOOTING CHARTS

The following charts are devoted to troubleshooting which, if followed carefully, will assist you in tracking down a fault to the correct stage.
In order to utilize the charts (fault trees), first establish the complants, e.g.–NO Raster, NO Sound and etc.
Locate the chart applicable and then progress through the various alternatives until a final block indicates the defective components or stage.

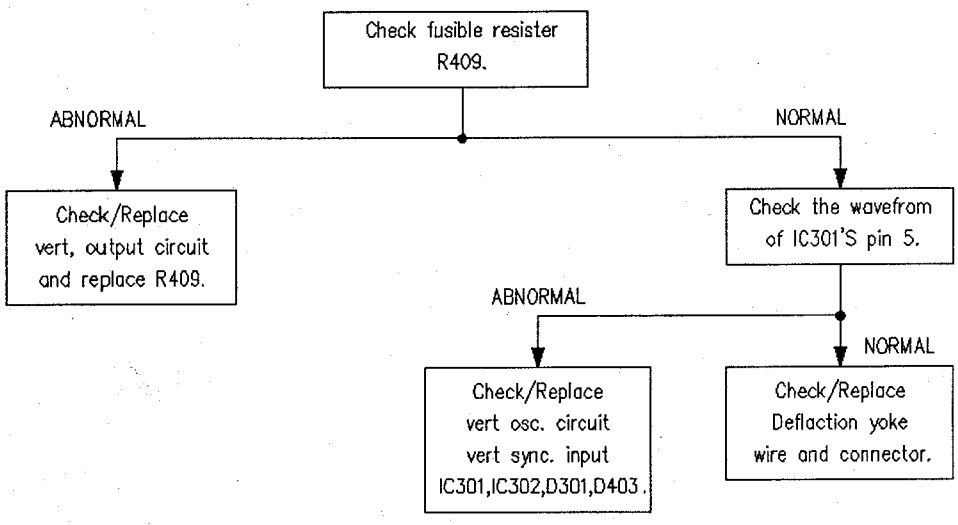
NO POWER



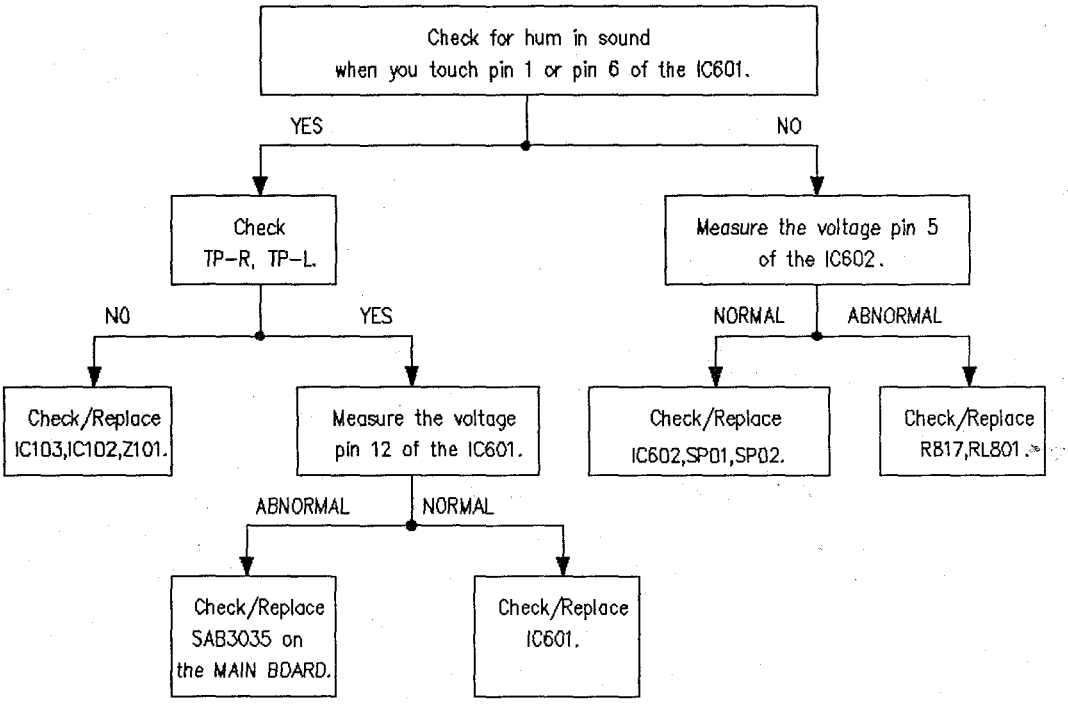
NO RASTER AND NO SOUND



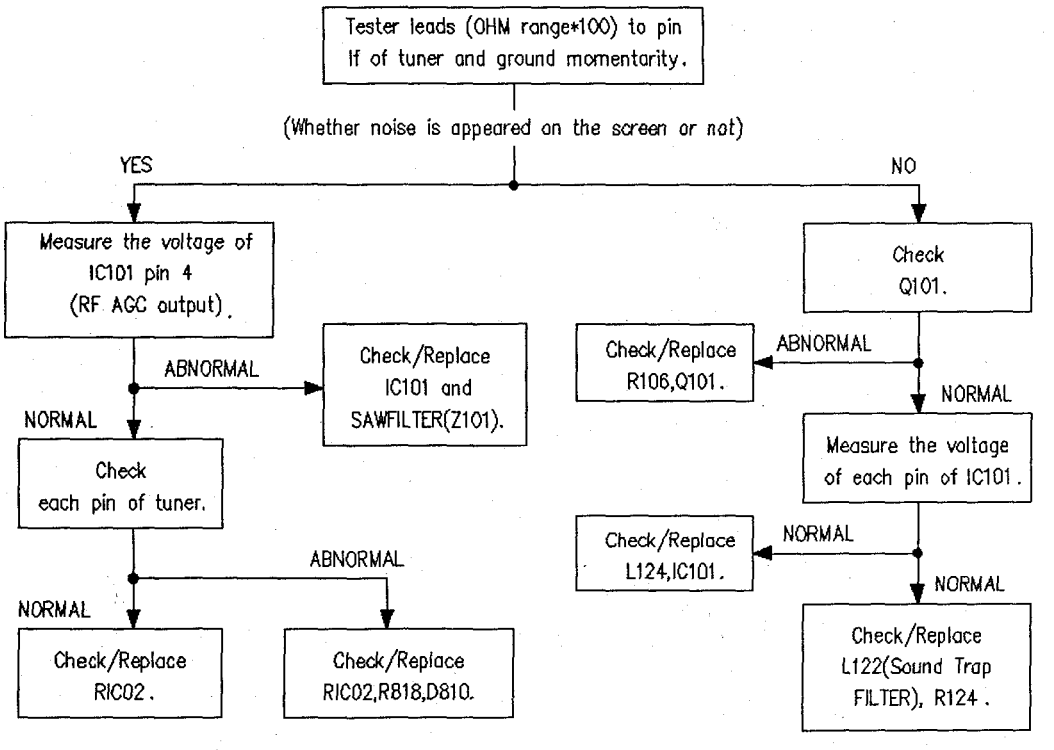
NO VERT SCAN (ONE HORIZ. LINE BASTER)


Check fusible resister R409.
ABNORMAL
NORMAL
Check/Replace vert, output circuit and replace R409.
Check the wavefrom of IC301'S pin 5.
ABNORMAL
NORMAL
Check/Replace vert osc. circuit vert sync. input IC301,IC302,D301,D403.
Check/Replace Deflaction yoke wire and connector.

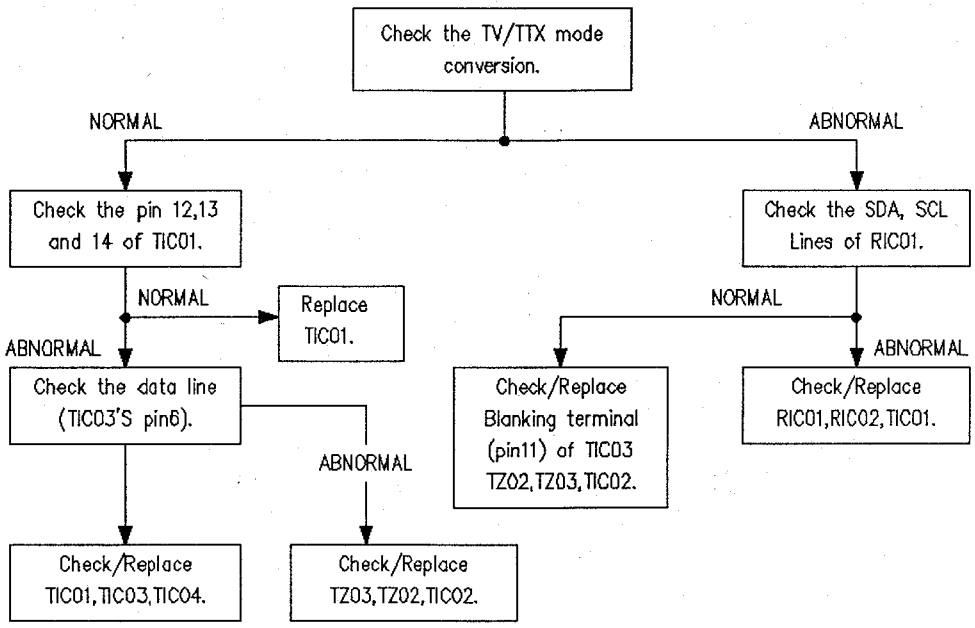
NO SOUND (PICTURE OK)



NO PICTURE (RASTER AND SOUND OR NO SOUND)



NO TELETEXT


Check the TV/TTX mode conversion.
NORMAL
ABNORMAL
Check the pin 12,13 and 14 of TIC01.
Check the SDA, SCL Lines of RIC01.
NORMAL
Replace TIC01.
ABNORMAL
NORMAL
ABNORMAL
Check the data line (TIC03'S pin6).
Check/Replace Blanking terminal (pin11) of TIC03 TZ02,TZ03,TIC02.
Check/Replace RIC01,RIC02,TIC01.
ABNORMAL
Check/Replace TIC01,TIC03,TIC04.
Check/Replace TZ03,TZ02,TIC02.

MTTS2 FEATURES

1. CONTROL SYSTEM

■ TUNING PROCESSOR	MAB 8461P W203
■ OPEX (LED DIRVER)	SAA 1064
■ NV MEMORY	PCF 8582
■ CITAC	SAB 3035
■ TEXT PROCESSOR	MAB 8461P W115 or PCF 84C81/CTV 972 1.1
■ CCT	SAA 5243
■ VIP	SAA 5231
■ S-RAM	KM 6264AL-10

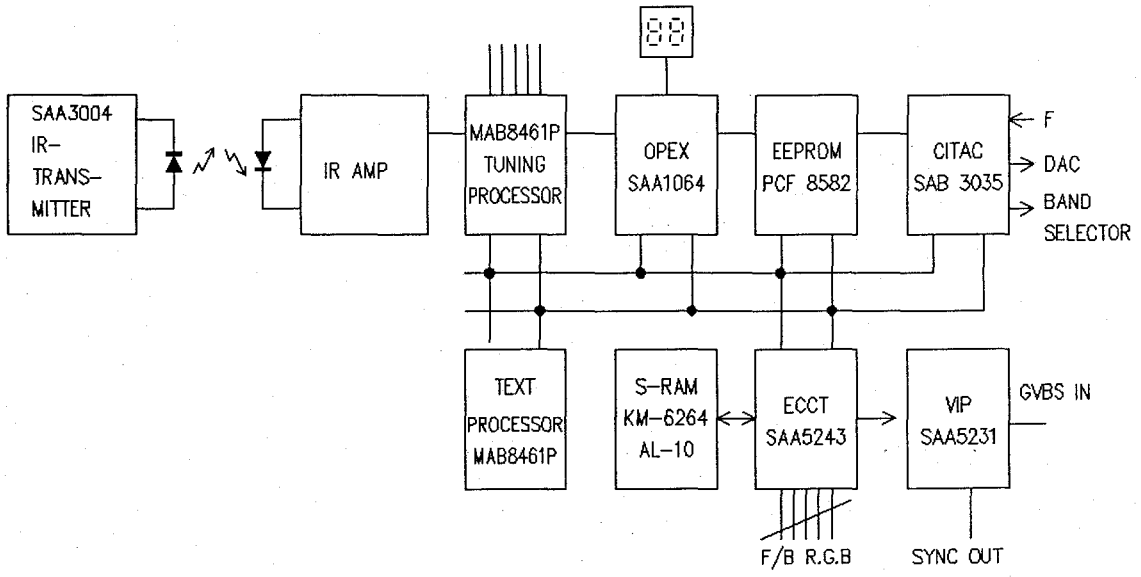
2. FEATURES

* IR remote control decoding and local keyboard scan.
* Full feature frequency-synthesized tuning with AFC.
* Control of non-volatile memory for the storage of the system parameters and 30 programmes.
* Generation of a 2-digit LED customer display.

Optional text decoder and microcontroller for :

* FASTEXT decoding with automatic linked page precapture.
* Full interpretation of extension packet 8/30.
* User-programmable favourite page number storage.
* Generation of on-screen display information.

3. MTTS2(RM104) BLOCK DIAGRAM



3-1. TUNING PROCESSOR MAB 8461P W203 (W197)

PIN	NAME	FUNCTION	PIN	NAME	FUNCTION
1	P22	DLEN line for the opex	15	XTAL1	4MHz oscillator
2	SDA	IIC bus data line	16	XTAL2	4MHz oscillator
3	SCL	IIC bus clock line	17	RESET	Power on reset input
4	P00	Keyboard scan line A	18	P10	Power switch on/off
5	P01	Keyboard scan line B	19	P11	
6	P02	Keyboard scan line C	20	P12	Tuning mode select
7	P03	Keyboard scan line D	21	P13	
8	P04	Keyboard scan line E	22	P14	
9	P05	Keyboard scan line F	23	P15	VCR switch output
10	P06	Keyboard scan line G	24	P16	List option select
11	P07	Keyboard scan line H	25	P17	Message received/standby LED output
12	INT/T0	Input from infra red pre amp	26	P20	
13	T1		27	P21	
14	VSS	Ground	28	VCC	Standby supply

3-2. TEXT PROCESSOR MAB 8461P W115 (PCF 84C81/CTV 972 1.1)

PIN	NAME	FUNCTION	PIN	NAME	FUNCTION
1	P22	Not used	15	XTAL1	6MHz oscillator
2	SDA	IIC data line	16	XTAL2	6MHz oscillator
3	SCL	IIC clock line	17	RESET	Power on reset
4	P00		18	P10	FLOF/LIST mode selected at power on
5	P01		19	P11	English/european symbols
6	P02		20	P12	
7	P03	Pon-output	21	P13	
8	P04		22	P14	
9	P05		23	P15	
10	P06		24	P16	
11	P07		25	P17	(FLOF/LIST)
12	INT/T0		26	P20	Select 128/256 byte NVRAM
13	T1	PL signal input	27	P21	(FLOF/LIST)
14	VSS	Ground	28	VCC	Supply

3-3. CITAC SAB3035 (COMPUTER INTERFACE FOR TUNING AND CONTROL)

The SAB3035 provides closed-loop digital tuning of TV receivers, with or without AFC, as required.
If also controlls up to 8 analogue functions, 4 general purpose I/O ports and 4 high-current outputs for the tuner band selection.

PIN	NAME	FUNCTION	PIN	NAME	FUNCTION
1	DAC4	Outputs of statics DAC	15	TUN	Tuning voltage amplifier output
2	DAC5	Outputs of statics DAC	16	VP1	+12V supply voltage
3	DAC6	Outputs of statics DAC	17	VP3	32V supply for tuning voltage amplifier
4	DAC7	Outputs of statics DAC	18	P10	High-current band selection outputf ports
5	SDA	Serial data line (IIC bus)	19	P11	High-current band selection outputf ports
6	SCL	Serial clock line (IIC bus)	20	P12	High-current band selection outputf ports
7	P20	General purpose in/output port	21	P13	High-current band selection outputf ports
8	P21	General purpose in/output port	22	VP2	Positive supply for high current band
9	P22	General purpose in/output port			Selection output circuits
10	P23	General purpose in/output port	23	FIDV	Input from prescaler
11	AFC+	AFC Input	24	OSC	Crystal oscillator input
12	AFC-	AFC Input	25	DAC0	Output of static DAC
13	T1	Tuning voltage amplifier inverting	26	DAC1	Output of static DAC
14	GND	Ground	27	DAC2	Output of static DAC
			28	DAC3	Output of static DAC

3-4. VIP SAA5231 (TELETEXT VIDEO PROCESSOR)

PIN	FUNCTION	PIN	FUNCTION
1	Sync output	15	Data output (TTD)
2	Video input level select	16	Supply
3	HF filter	17	6MHz output
4	Store HF	18	Oscillator output
5	Store amplitude	19	Filter 2
6	Store zero level	20	Oscillator input
7	External data input	21	Filter 1
8	Data timing	22	Sandcastle input pulse ($\overline{PL}/\overline{CBB}$)
9	Store phase	23	Pulse timing resistor
10	$\overline{VCR}$	24	Pulse timing capacitor
11	Crystal	25	Video composite sync output (VCS)
12	Clock filter	26	Black level
13	Ground	27	Composite video input
14	Clock output (TTC)	28	Text composite sync input ($\overline{TCS}$) or Scan composite sync input ($\overline{SCS}$)

3-5. ECCT SAA5243 (ENHANCED COMPUTER CONTROLLED TELETEXT CIRCUIT)

The SAA5243 is a MOS N-channel integrated circuit which performs all the digital logic functions of a 625-line World System Teletext decoder. It operates in conjunction with the teletext video processor SAA5231, standard static RAMs and is controlled via the 2-wire I C bus. The device can be used to provide videotex display conforming to a serial character attribute protocol.

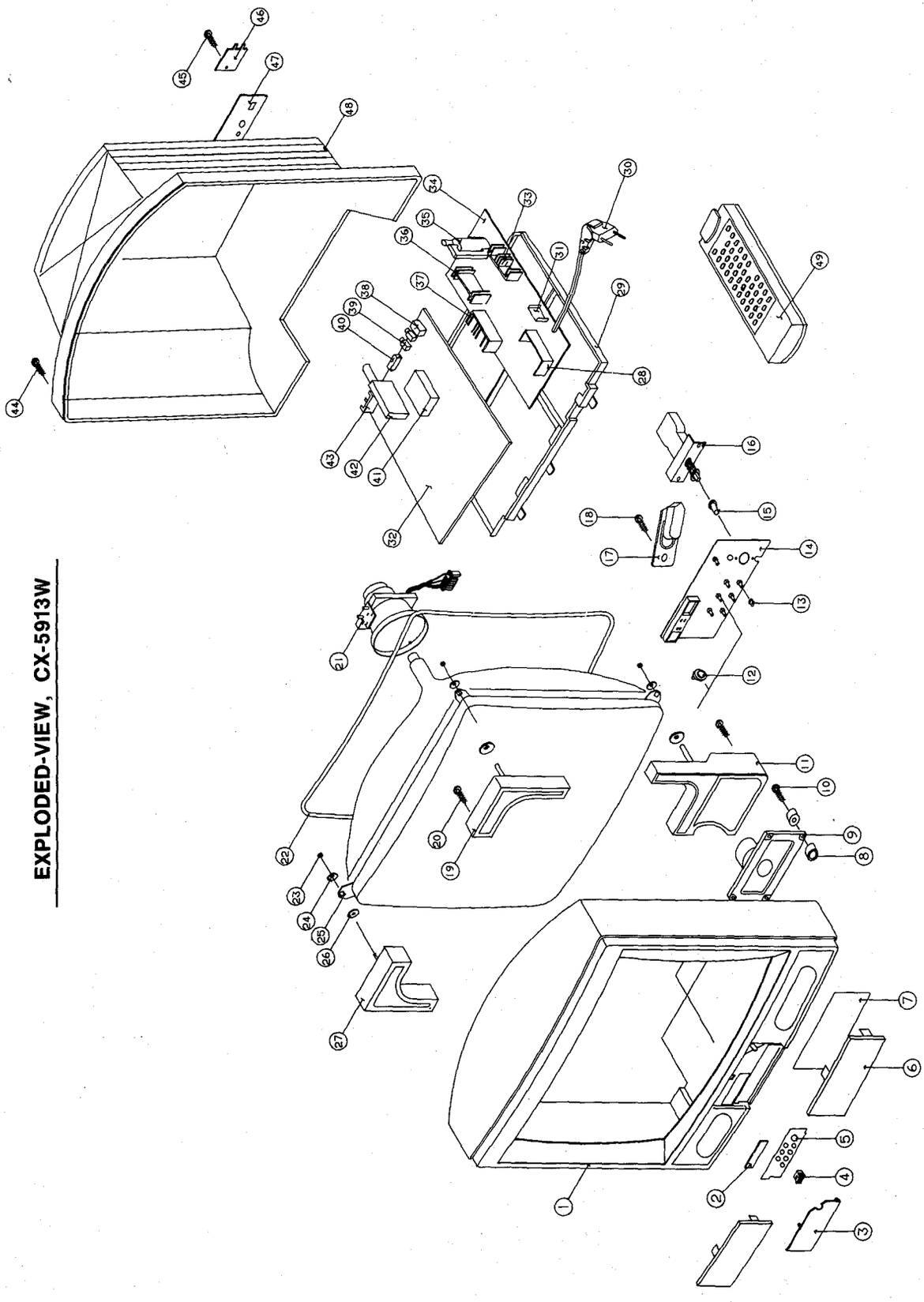
PIN	NAME	FUNCTION	PIN	NAME	FUNCTION
1	VDD	Power supply	12	$\overline{TCS}/\overline{SCS}$	Text composite sync
2,3,40	A10,A11,A12	Chapter address			/scan composite sync
4	OE	Output enable	13,14,15	R.G.B	Red,Green,Blue
5	WE	Write enable	16	COR	Contrast reduction
6	TTD	Teletext data	17	BLN	Blanking
7	TTC	Teletext clock	18	Y	Character foreground
8	$\overline{ODD}$/EVEN	ODD/EVEN	19	SCL	Serial clock
9	F6	Charater display clock	20	SDA	Serial data
10	VCS	Video composite sync	21	VSS	Ground
11	SAND	Sandcastle	22 - 29	D0-D7	8 RAM data lines
			30 - 39	A0-A9	RAM address

3-7. OPEX SAA1064 (OUTPUT PORT EXPANDER)

The PCF8582 is a 2K-bit 5V electrically eraseable programmable read only memory (EEPROM) organized as 256 by 8 bits. It is designed in a floating gate CMOS technology.
As data bytes are received and transmitted via the serial I C bus, an eight pin DIL package is sufficient.
Up to eight PCF8582, the devices may be connected to the I C bus.
Chip selection is accomplished by three address inputs.

PIN	NAME	FUNCTION	PIN	NAME	FUNCTION
1	A0	Address input or test mode select	15	SDA	Serial data (I C bus line)
2	A1	Address input or test mode select	16	SCL	Serial clock (I C bus line)
3	A2	Address input or test mode select	17	RC	Input for timer constant
4	VSS	Ground	18	VDD	Supply

EXPLODED-VIEW, CX-5913W



E X P L O D E D V I E W

N O	DESCRIPTION	CODE - NO	SPECIFICATION	Q'TY
1	CABINET-FRONT	36000-123-510	HIPS HB BLK #055ALL(PHILIPS)	1
2	WINDOW-REMOCON	37653-120-010	PVC T1.0,CLR,CX5913	1
3	DOOR	37642-131-010	PC SMOG(5913W)	1
4	CATCH-PUSH,DOOR	36698-100-110	KIFUCO,LA701	1
5	PVC-CONTROL	37802-115-010	PVC-SHEET T0.3,CX5913	1
6	GRILLE-WOOFER	37713-224-210	SPC-1 100 T0.5 4R 677	2
7	NET-COVER,SPEAKER	36843-101-020	JERSEY-CLOTH T0.5(189X75)CX	2
8	WASHER-GUM,SPEAKER	36834-115-410	NEOPRENE BLK 50%	8
9	SPEAKER-GENERAL	34209-169-460	06Q01BRA 10W8	2
10	SCREW-TAP,RH	37148-540-151	2S-4X15 FE FZY	8
11	HOLDER-CRT,BOT	36022-108-010	ABS V0 GRAY,L	1
12	DAMPER-GEAR	35208-100-030	BIG TYPE #120 BLK	1
13	KNOB-CHANNEL	37624-163-610	ABS HB BLK RUBBER S/W	7
14	ASSY-PWB,CONTROL	*3D33-00567-030	CX5913W	1
15	KNOB-POWER	37624-168-910	ABS BH BLK	1
16	SWITCH-PUSH(COVER)	33529-138-090	ME5 70060-026	1
17	KNOB-POWER	37624-619-820	HIPS HB RED(SEG)	1
18	SCREW-TAP,RH	37148-540-101	2S-4X10 FE FZY	1
19	HOLDER-CRT,TOP	36023-117-720	ABS V0 GRAY,L	1
20	SCREW-TAP,RH	37148-540-201	2S-4X20 FE FZY	16
21	DEFL-YOKE	ITC		
22	COIL-DEGAUSSING	32479-029-301	29RT 85L 1500/L1500(D)	1
23	NET-HEX	37208-115-001	1-M5 FE FZY	4
24	WASHER-SPRING	37334-105-530	SBHG-1 100 T1.0	4
25	CRT-COLOR	32019-300-102	A59EAK 01X01	1
26	WASHER-GUM,CRT	36834-110-110	MUTURAL,RUBBER,BLK T3.0	4
27	HOLDER-CRT,TOP	36023-117-710	ABS V0 GRAY R	1
28	HEAT-SINK	35684-118-410	A1050S-H14 T2.0	1
29	HOLDER-CHASSIS	36021-103-510	ABS V0 GRAY(P88MTS)	1
30	POWER-CORD	33053-816-584	KP-419J/LTCE-2F/8FT-HOU	1
31	HEAT-SINK	35684-113-710	PBP-3 1/2H T0.5	1
32	PWB-MAIN <S.N.A>	33004-144-021	330X245X1.6T,25P88MT	1
33	HEAT-SINK,C	35682-118-810	A6063 EXTR WHT	1
34	PWB-SUB <S.N.A>	33004-144-051	330X180X1.6T,SP207	1
35	TRANS-FLYBACK	32859-200-004	FCR-25A003	1
36	HEAT-SINK,SOUND	35682-105-030	A6063 EXTR WHT	1
37	HEAT-SINK,C	35684-118-810	A1063 EXTR WHT	1
38	SOCKET-S,VHS	33329-100-150	TCS7549-01-201	1
39	JACK-PIN(YEL)	33334-104-910	JPJ0556-01-040	1
40	RECEPTACLE-PERI	33134-103-030	HXC-1510-01-300A	1
41	SHIELD-CASE	34544-128-010	SPTE T0.25	1
42	TUNER	34519-990-090	ECC-2885PD(P)	1
43	HEAT-SINK,TR	35684-118-340	A6063 EXTR BLK H45	1
44	SCREW-TAP,TH	37128-540-153	2S-4X15 FE FZB	7
45	SCREW-TAP,TH	37128-540-153	2S-4X15 FE FZB	1
46	COVER-AC,CORD	36604-135-910	HIPS HB BLK 348 PAL	1
47	PVC-COVER,BACK	37802-123-010	PVC-SHEET T0.3 BLK	1
48	CABINET-BACK	36000-124-010	HIPS V0 BLK(BASF 455 FWU)	1
49	ASSY-TRANSMITTER	*3F14-00022-020	TM22,RM104,50,BLK NO	1

C H A S S I S R E P L A C E M E N T P A R T S L I S T

ABBREVIATIONS:

CC	C-CERAMIC	RC	R-COMPOSITION
CE	C-ELECTROLYTIC	RD	R-CARBON
CFS	C-M,POLYESTER	RF	R-FUSIBLE
CK	C-CERAMIC,HK	RM	R-METAL,FILM
CQ	C-POLYPROPYLENE,POLYESTER	RP	R-CEMENT WIRE
CS	C-TANTALIUM,SOLID	RS	R-METAL,OXIDE

NOTE: The items with "*" are usually out of stock since they are seldom required for the routine service. There may be some anticipated delay when you order these items.
*** S.N.A.=Service Not Available.***

Loc No	Supplier Part No.	Description
	1 . P W B - M A I N	
PWB	33004-144-021	330X245X1.6T <S.N.A>
	RESISTORS	
R101	31018-277-562	RD 1/4T 5.6K-J
R102	31018-277-102	RD 1/4T 1K-J
R103	31018-277-270	RD 1/4T 27-J
R104	31018-277-102	RD 1/4T 1K-J
R106	31018-277-101	RD 1/4T 100-J
R107	31018-277-221	RD 1/4T 220-J
R120	31018-277-331	RD 1/4T 330-J
R121	31018-277-824	RD 1/4T 820K-J
R122	31018-277-124	RD 1/4T 120K-J
R123	31018-277-331	RD 1/4T 330-J
R124	31018-277-151	RD 1/4T 150-J
R125	31018-277-271	RD 1/4T 270-J
R126	31018-277-104	RD 1/4T 100K-J
R127	31018-277-393	RD 1/4T 39K-J
R128	31018-177-432	RD 1/8T 4.3K-J
R129	31018-277-273	RD 1/4T 27K-J
R130	31018-277-243	RD 1/4T 24K-J
R131	31018-277-104	RD 1/4T 100K-J
R141	31018-277-101	RD 1/4T 100-J
R142	31018-277-101	RD 1/4T 100-J
R150	31018-277-681	RD 1/4T 680-J
R151	31018-277-561	RD 1/4T 560-J
R152	31018-277-229	RD 1/4T 2.2-J
R154	31018-277-122	RD 1/4T 1.2K-J
R155	31018-277-561	RD 1/4T 560-J
R156	31018-277-681	RD 1/4T 680-J
R170	31018-277-562	RD 1/4T 5.6K-J
R171	31018-277-563	RD 1/4T 56K-J
R173	31018-277-104	RD 1/4T 100K-J
R174	31018-277-104	RD 1/4T 100K-J
R177	31047-256-193	RM 1/4T 619K-F
R178	31047-256-193	RM 1/4T 619K-F
R179	31018-277-103	RD 1/4T 10K-J
R180	31018-277-752	RD 1/4T 7.5K-J
R181	31018-277-392	RD 1/4T 3.9K-J
R182	31018-277-752	RD 1/4T 7.5K-J
R183	31018-277-302	RD 1/4T 3K-J
R184	31018-277-103	RD 1/4T 10K-J
R197	31046-467-111	RS 1T 110-J(AUTO)
R201	31018-277-102	RD 1/4T 1K-J
R202	31018-277-102	RD 1/4T 1K-J
R203	31018-277-750	RD 1/4T 75-J
R204	31018-277-750	RD 1/4T 75-J
R205	31018-277-750	RD 1/4T 75-J
R206	31018-277-750	RD 1/4T 75-J
R207	31018-277-151	RD 1/4T 150-J
R213	31018-277-101	RD 1/4T 100-J
R214	31018-277-101	RD 1/4T 100-J
R215	31018-277-101	RD 1/4T 100-J
R220	31018-277-682	RD 1/4T 6.8K-J
R221	31018-277-751	RD 1/4T 750-J
R222	31018-277-272	RD 1/4T 2.7K-J
R224	31018-277-221	RD 1/4T 220-J
R225	31018-277-272	RD 1/4T 2.7K-J
R226	31018-277-332	RD 1/4T 3.3K-J
R231	31018-277-223	RD 1/4T 22K-J
R232	31018-277-103	RD 1/4T 10K-J
R233	31018-277-823	RD 1/4T 82K-J
R234	31018-277-334	RD 1/4T 330K-J
R235	31018-277-684	RD 1/4T 680K-J
R236	31018-277-683	RD 1/4T 68K-J
R238	31018-277-472	RD 1/4T 4.7K-J
R239	31018-277-332	RD 1/4T 3.3K-J
R240	31018-277-151	RD 1/4T 150-J

Loc No	Supplier Part No.	Description
R307	31018-277-152	RD 1/4T 1.5K-J
R320	31048-275-123	RM 1/4T 12K-F
R321	31048-275-123	RM 1/4T 12K-F
R326	31018-277-101	RD 1/4T 100-J
R501	31018-277-105	RD 1/4T 1M-J
R502	31018-277-332	RD 1/4T 3.3K-J
R503	31018-277-153	RD 1/4T 15K-J
R504	31018-277-153	RD 1/4T 15K-J
R505	31018-277-272	RD 1/4T 2.7K-J
R506	31018-277-181	RD 1/4T 180-J
R507	31018-277-272	RD 1/4T 2.7K-J
R509	31018-277-123	RD 1/4T 12K-J
R510	31018-277-103	RD 1/4T 10K-J
R512	31018-277-431	RD 1/4T 430-J
R513	31018-277-273	RD 1/4T 27K-J
R514	31018-277-682	RD 1/4T 6.8K-J
R515	31018-277-221	RD 1/4T 220-J
R516	31018-277-222	RD 1/4T 2.2K-J
R517	31018-277-122	RD 1/4T 1.2K-J
R518	31018-277-101	RD 1/4T 100-J
R519	31018-277-203	RD 1/4T 20K-J
R520	31018-277-821	RD 1/4T 820-J
R521	31018-277-272	RD 1/4T 2.7K-J
R522	31018-277-122	RD 1/4T 1.2K-J
R523	31018-277-301	RD 1/4T 300-J
R524	31018-277-472	RD 1/4T 4.7K-J
R525	31018-277-472	RD 1/4T 4.7K-J
R526	31018-277-561	RD 1/4T 560-J
R527	31018-277-472	RD 1/4T 4.7K-J
R529	31018-277-222	RD 1/4T 2.2K-J
R547	31018-277-470	RD 1/4T 47-J
R548	31018-277-101	RD 1/4T 100-J
R549	31018-277-101	RD 1/4T 100-J
R550	31018-277-472	RD 1/4T 4.7K-J
R551	31018-277-333	RD 1/4T 33K-J
R552	31018-277-333	RD 1/4T 33K-J
R553	31018-277-479	RD 1/4T 4.7-J
R554	31018-277-222	RD 1/4T 2.2K-J
R555	31018-277-151	RD 1/4T 150-J
R556	31018-277-151	RD 1/4T 150-J
R607	31018-277-623	RD 1/4T 62K-J
R611	31018-277-151	RD 1/4T 150-J
R612	31018-277-151	RD 1/4T 150-J
R613	31018-277-151	RD 1/4T 150-J
R614	31018-277-562	RD 1/4T 5.6K-J
R615	31018-277-152	RD 1/4T 1.5K-J
R616	31018-277-562	RD 1/4T 5.6K-J
R617	31018-277-272	RD 1/4T 2.7K-J
R618	31018-277-103	RD 1/4T 10K-J

Loc No	Supplier Part No.	Description
R619	31018-277-203	RD 1/4T 20K-J
RR02	31018-277-101	RD 1/4T 100-J
RR03	31018-277-101	RD 1/4T 100-J
RR04	31018-277-471	RD 1/4T 470-J
RR05	31018-277-471	RD 1/4T 470-J
RR06	31018-277-471	RD 1/4T 470-J
RR07	31018-277-471	RD 1/4T 470-J
RR08	31018-277-471	RD 1/4T 470-J
RR09	31018-277-471	RD 1/4T 470-J
RR10	31018-277-471	RD 1/4T 470-J
RR11	31018-277-471	RD 1/4T 470-J
RR12	31018-277-221	RD 1/4T 220-J
RR13	31018-277-471	RD 1/4T 470-J
RR14	31018-277-222	RD 1/4T 2.2K-J
RR15	31018-277-222	RD 1/4T 2.2K-J
RR16	31018-277-105	RD 1/4T 1M-J
RR17	31018-277-473	RD 1/4T 47K-J
RR18	31018-277-472	RD 1/4T 4.7K-J
RR19	31018-277-332	RD 1/4T 3.3K-J
RR20	31018-277-132	RD 1/4T 1.3K-J
RR21	31018-277-472	RD 1/4T 4.7K-J
RR22	31018-277-822	RD 1/4T 8.2K-J
RR23	31018-277-392	RD 1/4T 3.9K-J
RR24	31018-277-152	RD 1/4T 1.5K-J
RR25	31018-277-103	RD 1/4T 10K-J
RR26	31018-277-103	RD 1/4T 10K-J
RR27	31018-277-683	RD 1/4T 68K-J
RR28	31018-277-563	RD 1/4T 56K-J
RR29	31018-277-103	RD 1/4T 10K-J
RR31	31018-277-393	RD 1/4T 39K-J
RR32	31018-277-470	RD 1/4T 47-J
RR33	31018-277-433	RD 1/4T 43K-J
RR34	31018-277-393	RD 1/4T 39K-J
RR35	31018-277-103	RD 1/4T 10K-J
RR38	31018-277-683	RD 1/4T 68K-J
RR39	31018-277-104	RD 1/4T 100K-J
RR40	31018-277-683	RD 1/4T 68K-J
RR41	31018-277-752	RD 1/4T 7.5K-J
RR42	31018-277-153	RD 1/4T 15K-J
RR43	31018-277-223	RD 1/4T 22K-J
RR44	31018-277-153	RD 1/4T 15K-J
RR45	31046-467-470	RS 1T 47-J (AUTO)
RR46	31018-277-473	RD 1/4T 47K-J
RR47	31046-468-688	RS 1T 0.68-K (AUTO)
RR48	31046-468-688	RS 1T 0.68-K (AUTO)
RR51	31046-467-470	RS 1T 47-J (AUTO)
RR52	31018-277-102	RD 1/4T 1K-J
RR53	31018-277-512	RD 1/4T 5.1K-J
RR54	31018-277-152	RD 1/4T 1.5K-J

Loc No	Supplier Part No.	Description
RR56	31018-277-563	RD 1/4T 56K-J
RR57	31018-277-102	RD 1/4T 1K-J
RR58	31018-277-104	RD 1/4T 100K-J
RR59	31018-277-681	RD 1/4T 680-J
RR60	31018-277-681	RD 1/4T 680-J
RR61	31018-277-822	RD 1/4T 8.2K-J
RR64	31018-277-104	RD 1/4T 100K-J
RR65	31018-277-332	RD 1/4T 3.3K-J
RR66	31018-277-682	RD 1/4T 6.8K-J
RR67	31018-277-222	RD 1/4T 2.2K-J
SC35	31018-277-750	RD 1/4T 75-J
SR01	31018-277-103	RD 1/4T 10K-J
SR03	31018-277-103	RD 1/4T 10K-J
SR05	31018-277-220	RD 1/4T 22-J
SR06	31018-277-104	RD 1/4T 100K-J
SR07	31018-277-104	RD 1/4T 100K-J
SR08	31018-277-563	RD 1/4T 56K-J
SR09	31018-277-220	RD 1/4T 22-J
SR10	31018-277-103	RD 1/4T 10K-J
SR11	31018-277-470	RD 1/4T 47-J
SR12	31018-277-750	RD 1/4T 75-J
SR13	31018-277-750	RD 1/4T 75-J
SR14	31018-277-103	RD 1/4T 10K-J
SR15	31018-277-103	RD 1/4T 10K-J
SR16	31018-277-102	RD 1/4T 1K-J
SR17	31018-277-222	RD 1/4T 2.2K-J
SR18	31018-277-222	RD 1/4T 2.2K-J
SR19	31018-277-561	RD 1/4T 560-J
SR20	31018-277-563	RD 1/4T 56K-J
SR21	31018-277-220	RD 1/4T 22-J
SR22	31018-277-473	RD 1/4T 47K-J
SR23	31018-277-132	RD 1/4T 1.3K-J
SR24	31018-277-132	RD 1/4T 1.3K-J
SR25	31018-277-473	RD 1/4T 47K-J
SR27	31018-277-750	RD 1/4T 75-J
SR28	31018-277-680	RD 1/4T 68-J
SR29	31018-277-102	RD 1/4T 1K-J
SR30	31018-277-102	RD 1/4T 1K-J
SR31	31018-277-473	RD 1/4T 47K-J
SR32	31018-277-223	RD 1/4T 22K-J
SR33	31018-277-473	RD 1/4T 47K-J
SR34	31018-277-223	RD 1/4T 22K-J
SR36	31018-277-750	RD 1/4T 75-J
SR37	31018-277-241	RD 1/4T 240-J
SR38	31018-277-104	RD 1/4T 100K-J
SR40	31018-277-220	RD 1/4T 22-J
SR41	31018-277-220	RD 1/4T 22-J
SR42	31018-277-103	RD 1/4T 10K-J
SR43	31018-277-563	RD 1/4T 56K-J
SR44	31018-277-103	RD 1/4T 10K-J
SR50	31018-277-102	RD 1/4T 1K-J
SR51	31018-277-102	RD 1/4T 1K-J
SR52	31018-277-473	RD 1/4T 47K-J
SR53	31018-277-681	RD 1/4T 680-J
SR54	31018-277-102	RD 1/4T 1K-J
SR55	31018-277-151	RD 1/4T 150-J
TR01	31018-277-223	RD 1/4T 22K-J
TR02	31018-277-105	RD 1/4T 1M-J
TR03	31018-277-472	RD 1/4T 4.7K-J
TR04	31018-277-103	RD 1/4T 10K-J
TR05	31018-277-103	RD 1/4T 10K-J
TR06	31018-277-823	RD 1/4T 82K-J
TR07	31018-277-472	RD 1/4T 4.7K-J
TR08	31018-277-332	RD 1/4T 3.3K-J
TR09	31018-277-222	RD 1/4T 2.2K-J
TR10	31018-277-470	RD 1/4T 47-J
TR11	31018-277-222	RD 1/4T 2.2K-J
TR12	31018-277-332	RD 1/4T 3.3K-J
TR13	31018-277-470	RD 1/4T 47-J
TR14	31018-277-222	RD 1/4T 2.2K-J
TR15	31018-277-332	RD 1/4T 3.3K-J
TR16	31018-277-470	RD 1/4T 47-J
TR17	31018-277-272	RD 1/4T 2.7K-J
TR18	31018-277-222	RD 1/4T 2.2K-J
TR19	31018-277-470	RD 1/4T 47-J
TR20	31018-277-563	RD 1/4T 56K-J
TR21	31018-277-511	RD 1/4T 510-J
TR22	31018-277-561	RD 1/4T 560-J
TR23	31018-277-392	RD 1/4T 3.9K-J
TR24	31018-277-471	RD 1/4T 470-J
TR25	31018-277-202	RD 1/4T 2K-J
TR26	31018-277-331	RD 1/4T 330-J
TR27	31018-277-303	RD 1/4T 30K-J
TR28	31018-277-153	RD 1/4T 15K-J
TR29	31018-277-202	RD 1/4T 2K-J
TR30	31018-277-181	RD 1/4T 180-J
TR31	31018-277-393	RD 1/4T 39K-J
TR32	31018-277-823	RD 1/4T 82K-J
TR33	31018-277-823	RD 1/4T 82K-J
TR34	31018-277-102	RD 1/4T 1K-J
TR35	31018-277-103	RD 1/4T 10K-J
TR36	31018-277-473	RD 1/4T 47K-J
TR37	31018-277-473	RD 1/4T 47K-J
		VARIABLE RESISTORS
VR120	31249-128-008	EVN-DJA A03 B50K
VR150	31249-128-004	EVN-DJA A03 B1K
VR151	31249-128-003	EVN-DJA A03 B2K

Loc No	Supplier Part No.	Description
VR152	31249-128-011	EVN-DJA A03 B500
VR201	31249-128-001	EVN-DJA A03 B10K
VR202	31249-128-001	EVN-DJA A03 B10K
VR501	31249-128-004	EVN-DJA A03 B1K
	CAPACITORS	
C100	31417-109-100	CK45 TAPG F 50V 102-Z
C101	31417-104-270	CK45 TAPG B 50V 681-K
C102	31407-106-250	CC45 TAPG SL 50V 331-J
C103	31417-109-140	CK45 TAPG F 50V 103-Z
C104	31417-109-140	CK45 TAPG F 50V 103-Z
C120	31417-109-140	CK45 TAPG F 50V 103-Z
C121	31417-109-100	CK45 TAPG F 50V 102-Z
C122	31417-109-140	CK45 TAPG F 50V 103-Z
C123	31607-402-220	CE04W TAPG 50V 2.2M
C124	31607-401-470	CE04W TAPG 16V 100M VENT
C125	31417-109-140	CK45 TAPG F 50V 103-Z
C126	31417-109-140	CK45 TAPG F 50V 103-Z
C127	31417-109-100	CK45 TAPG F 50V 102-Z
C128	31607-402-250	CE04W TAPG 50V 10M
C129	31417-109-140	CK45 TAPG F 50V 103-Z
C130	31609-401-510	CE04W 16V 1000M VENT SNA
C130	31417-109-140	CK45 TAPG F 50V 103-Z
C131	31407-101-270	CC45 TAPG SL 50V 470-J
C132	31407-101-270	CC45 TAPG SL 50V 470-J
C150	31507-121-430	CQ921M TAPG 100V 0.0047-
C151	31607-402-210	CE04W TAPG 50V 1M
C152	31507-121-180	CQ921M TAPG 100V 0.022M-
C153	31507-121-220	CQ921M TAPG 100V 0.047M-
C154	31407-105-300	CC45 TAPG CH 50V 680-J
C156	31417-109-140	CK45 TAPG F 50V 103-Z
C157	31507-121-220	CQ921M TAPG 100V 0.047M-
C158	31607-401-500	CE04W TAPG 16V 470M-M(SG
C160	31507-121-220	CQ921M TAPG 100V 0.047M-
C161	31507-121-220	CQ921M TAPG 100V 0.047M-
C162	31407-105-280	CC45 TAPG CH 50V 560-J
C171	31417-109-100	CK45 TAPG F 50V 102-Z
C172	31607-402-200	CE04W TAPG 50V 0.47M
C173	31607-402-070	CE04W TAPG 35V 22M
C174	31507-121-220	CQ921M TAPG 100V 0.047M-
C175	31507-121-220	CQ921M TAPG 100V 0.047M-
C176	31507-121-220	CQ921M TAPG 100V 0.047M-
C177	31507-121-220	CQ921M TAPG 100V 0.047M-
C178	31607-401-500	CE04W TAPG 16V 470M-M(SG
C179	31607-402-200	CE04W TAPG 50V 0.47M
C180	31607-401-460	CE04W TAPG 16V 47M
C181	31417-109-140	CK45 TAPG F 50V 103-Z
C182	31507-121-450	CQ921M TAPG 100V 0.0068M
C183	31507-121-450	CQ921M TAPG 100V 0.0068M
C184	31607-402-240	CE04W TAPG 50V 4.7M
C185	31607-402-240	CE04W TAPG 50V 4.7M
C186	31607-402-220	CE04W TAPG 50V 2.2M
C190	31607-401-460	CE04W TAPG 16V 47M
C191	31607-902-250	CE04W TAPG 50V 0.22M
C192	31607-402-250	CE04W TAPG 50V 10M
C193	31607-402-250	CE04W TAPG 50V 10M
C194	31607-402-250	CE04W TAPG 50V 10M
C196	31607-401-470	CE04W TAPG 16V 100M VENT
C201	31507-121-470	CQ921M TAPG 100V 0.01M-K
C202	31407-017-390	CC45 TAPG SL 50V 390-J
C203	31407-106-760	CC45 TAPG RH 50V 151-J
C204	31607-402-240	CE04W TAPG 50V 4.7M
C205	31607-402-240	CE04W TAPG 50V 4.7M
C206	31607-902-250	CE04W TAPG 50V 0.22M
C207	31607-402-240	CE04W TAPG 50V 4.7M
C208	31607-402-250	CE04W TAPG 50V 10M
C209	31509-123-270	CQ921M 100V 0.33MF(S)
C210	31407-057-330	CC45 TAPG CH 50V 330-J
C211	31509-123-270	CQ921M 100V 0.33MF(S)
C212	31507-121-180	CQ921M TAPG 100V 0.022M-
C213	31507-121-180	CQ921M TAPG 100V 0.022M-
C214	31507-121-180	CQ921M TAPG 100V 0.022M-
C215	31509-123-270	CQ921M 100V 0.33MF(S)
C216	31507-121-180	CQ921M TAPG 100V 0.022M-
C217	31507-121-180	CQ921M TAPG 100V 0.022M-
C218	31507-121-180	CQ921M TAPG 100V 0.022M-
C219	31607-401-500	CE04W TAPG 16V 470M-M(SG
C222	31507-121-450	CQ921M TAPG 100V 0.0068M
C235	31417-104-040	CK45 TAPG B 50V 181-K
C257	31607-402-240	CE04W TAPG 50V 4.7M
C501	31417-318-222	CK45 TAPG B50V 222-K
C502	31509-123-270	CQ921M 100V 0.33MF(S)
C503	31507-121-220	CQ921M TAPG 100V 0.047M-
C504	31509-123-270	CQ921M 100V 0.33MF(S)
C505	31407-105-280	CC45 TAPG CH 50V 560-J
C506	31507-121-260	CQ921M TAPG 100V 0.1U-J
C507	31507-121-260	CQ921M TAPG 100V 0.1U-J
C508	31507-121-180	CQ921M TAPG 100V 0.022M-
C509	31507-121-430	CQ921M TAPG 100V 0.0047-
C510	31507-121-430	CQ921M TAPG 100V 0.0047-
C512	31507-121-180	CQ921M TAPG 100V 0.022M-
C513	31407-047-221	CC45 TAPG RH 50V 221-J
C514	31507-121-180	CQ921M TAPG 100V 0.022M-
C515	31407-047-221	CC45 TAPG RH 50V 221-J
C516	31507-121-260	CQ921M TAPG 100V 0.1U-J
C517	31507-121-260	CQ921M TAPG 100V 0.1U-J
C518	31407-106-150	CC45 TAPG RH 50V 150-J
C519	31407-106-760	CC45 TAPG RH 50V 151-J

Loc No	Supplier Part No.	Description
C520	31407-047-221	CC45 TAPG RH 50V 221-J
C521	31407-106-760	CC45 TAPG RH 50V 151-J
C522	31407-106-150	CC45 TAPG RH 50V 150-J
C523	31507-121-470	CQ921M TAPG 100V 0.01M-K
C524	31507-121-470	CQ921M TAPG 100V 0.01M-K
C525	31607-402-480	CE04W TAPG 50V 47-W(+20-
C526	31407-017-390	CC45 TAPG SL 50V 390-J
C527	31407-106-760	CC45 TAPG RH 50V 151-J
C528	31407-105-260	CC45 TAPG CH 50V 470-J
C529	31407-106-150	CC45 TAPG RH 50V 150-J
C530	31507-121-180	CQ921M TAPG 100V 0.022M-
C531	31507-121-470	CQ921M TAPG 100V 0.01M-K
C531	31417-109-140	CK45 TAPG F 50V 103-Z
C532	31507-121-470	CQ921M TAPG 100V 0.01M-K
C533	31607-401-500	CE04W TAPG 16V 470M-M(SG
C534	31607-402-210	CE04W TAPG 50V 1M
C535	31607-402-210	CE04W TAPG 50V 1M
C536	31407-106-260	CC45 TAPG RH 50V 101-J
C537	31407-106-260	CC45 TAPG RH 50V 101-J
C538	31407-106-250	CC45 TAPG SL 50V 331-J
C539	31407-047-221	CC45 TAPG RH 50V 221-J
C540	31407-047-221	CC45 TAPG RH 50V 221-J
C541	31507-121-180	CQ921M TAPG 100V 0.022M-
C542	31507-121-180	CQ921M TAPG 100V 0.022M-
C543	31607-401-670	CE04W TAPG 25V 47M
C544	31409-047-271	CC45 RH 50V 271-J
C545	31607-402-240	CE04W TAPG 50V 4.7M
C546	31507-121-220	CQ921M TAPG 100V 0.047M-
C621	31607-902-250	CE04W TAPG 50V 0.22M
C622	31607-402-170	CE04W TAPG 50V 0.1U-L,L
C623	31609-401-740	CE04W 25V 2200M.VENT
C624	31607-902-250	CE04W TAPG 50V 0.22M
C626	31607-402-220	CE04W TAPG 50V 2.2M
C627	31607-902-250	CE04W TAPG 50V 0.22M
C628	31607-402-220	CE04W TAPG 50V 2.2M
C629	31607-402-170	CE04W TAPG 50V 0.1U-L,L
C630	31607-902-250	CE04W TAPG 50V 0.22M
C631	31607-402-250	CE04W TAPG 50V 10M
C632	31607-402-250	CE04W TAPG 50V 10M
C633	31607-402-210	CE04W TAPG 50V 1M
RC01	31407-057-330	CC45 TAPG CH 50V 330-J
RC02	31407-057-330	CC45 TAPG CH 50V 330-J
RC03	31607-402-220	CE04W TAPG 50V 2.2M
RC04	31607-401-470	CE04W TAPG 16V 100M VENT
RC05	31519-002-580	CFS922M 100V 1.5U-J
RC06	31507-121-200	CQ921M TAPG 100V 0.033M-
RC07	31407-057-330	CC45 TAPG CH 50V 330-J
RC08	31507-121-220	CQ921M TAPG 100V 0.047M-
RC09	31417-318-222	CK45 TAPG B50V 222-K
RC10	31607-402-240	CE04W TAPG 50V 4.7M
RC11	31607-401-500	CE04W TAPG 16V 470M-M(SG
RC12	31417-109-140	CK45 TAPG F 50V 103-Z
RC13	31609-401-510	CE04W 16V 1000M VENT SNA
RC14	31417-109-140	CK45 TAPG F 50V 103-Z
RC30	31417-109-140	CK45 TAPG F 50V 103-Z
RC31	31507-121-260	CQ921M TAPG 100V 0.1U-J
RCN01	31499-009-420	NCYFIH102M09
SC01	31607-402-250	CE04W TAPG 50V 10M
SC02	31607-402-250	CE04W TAPG 50V 10M
SC03	31607-803-280	CE04W TAPG 50V 1U-M(NP)
SC04	31607-401-470	CE04W TAPG 16V 100M VENT
SC05	31417-109-140	CK45 TAPG F 50V 103-Z
SC06	31607-803-120	CE04W TAPG 16V 10u-NP
SC07	31607-803-120	CE04W TAPG 16V 10u-NP
SC08	31607-803-280	CE04W TAPG 50V 1U-M(NP)
SC09	31417-109-140	CK45 TAPG F 50V 103-Z
SC10	31607-401-470	CE04W TAPG 16V 100M VENT
SC11	31417-109-140	CK45 TAPG F 50V 103-Z
SC12	31607-402-240	CE04W TAPG 50V 4.7M
SC13	31607-402-240	CE04W TAPG 50V 4.7M
SC14	31607-402-250	CE04W TAPG 50V 10M
SC15	31607-402-250	CE04W TAPG 50V 10M
SC16	31607-402-210	CE04W TAPG 50V 1M
SC17	31607-402-210	CE04W TAPG 50V 1M
SC18	31607-803-120	CE04W TAPG 16V 10u-NP
SC19	31607-803-120	CE04W TAPG 16V 10u-NP
SC20	31417-109-140	CK45 TAPG F 50V 103-Z
SC21	31607-401-470	CE04W TAPG 16V 100M VENT
SC22	31417-109-140	CK45 TAPG F 50V 103-Z
SC23	31607-402-250	CE04W TAPG 50V 10M
SC24	31407-106-760	CC45 TAPG RH 50V 151-J
SC25	31417-109-140	CK45 TAPG F 50V 103-Z
SC26	31607-402-250	CE04W TAPG 50V 10M
SC27	31607-402-250	CE04W TAPG 50V 10M
SC28	31607-401-470	CE04W TAPG 16V 100M VENT
SC29	31417-109-140	CK45 TAPG F 50V 103-Z
SC30	31607-803-120	CE04W TAPG 16V 10u-NP
SC32	31417-109-140	CK45 TAPG F 50V 103-Z
SC33	31607-401-470	CE04W TAPG 16V 100M VENT
SC34	31417-109-140	CK45 TAPG F 50V 103-Z
SC36	31417-109-140	CK45 TAPG F 50V 103-Z
TC01	31407-106-200	CC45 TAPG RH50V 270-J
TC02	31407-106-200	CC45 TAPG RH50V 270-J
TC03	31607-402-220	CE04W TAPG 50V 2.2M
TC04	31417-109-140	CK45 TAPG F 50V 103-Z
TC05	31507-121-180	CQ921M TAPG 100V 0.022M-
TC06	31407-106-150	CC45 TAPG RH 50V 150-J
TC07	31417-109-100	CK45 TAPG F 50V 102-Z

Loc No	Supplier Part No.	Description
TC08	31417-104-250	CK45 TAPG B 50V 471-K
TC09	31417-104-250	CK45 TAPG B 50V 471-K
TC10	31407-106-260	CC45 TAPG RH 50V 101-J
TC11	31407-106-150	CC45 TAPG RH 50V 150-J
TC12	31407-106-200	CC45 TAPG RH50V 270-J
TC13	31607-402-250	CE04W TAPG 50V 10M
TC14	31607-402-220	CE04W TAPG 50V 2.2M
TC15	31507-121-240	CQ921M TAPG 100V 0.068M-
TC16	31417-104-220	CK45 TAPG B 50V 221-K
TC17	31507-121-220	CQ921M TAPG 100V 0.047M-
TC18	31407-106-150	CC45 TAPG RH 50V 150-J
TC19	31507-121-220	CQ921M TAPG 100V 0.047M-
TC20	31607-401-500	CE04W TAPG 16V 470M-M(SG
TC21	31607-402-250	CE04W TAPG 50V 10M
TC22	31507-121-220	CQ921M TAPG 100V 0.047M-
TC23	31607-402-240	CE04W TAPG 50V 4.7M
TC25	31417-109-100	CK45 TAPG F 50V 102-Z
TC26	31607-402-240	CE04W TAPG 50V 4.7M
TC28	31407-106-260	CC45 TAPG RH 50V 101-J
TC29	31407-106-260	CC45 TAPG RH 50V 101-J
TC30	31417-109-140	CK45 TAPG F 50V 103-Z
TC31	31407-106-180	CC45 TAPE RH 50V 180-J
TC32	31407-106-180	CC45 TAPE RH 50V 180-J
TCN01	31499-009-400	B9HC0118-33N(9P 100PF)
VC501	31829-105-610	TZ03P 450E
	SEMICONDUCTORS	
D190	32167-661-011	KV1236Z
D191	32167-406-080	MTZ 5.1B
D201	32167-406-480	1N4148 TAPG
D202	32167-406-480	1N4148 TAPG
D203	32167-401-630	EQA02-12A/MTZ13A(TAPG)
D204	32167-401-630	EQA02-12A/MTZ13A(TAPG)
D205	32167-401-630	EQA02-12A/MTZ13A(TAPG)
D501	32167-406-480	1N4148 TAPG
D502	32167-406-480	1N4148 TAPG
D503	32167-401-800	EQA02-06A/MTZ5.6B(TAPG)
D603	32167-406-480	1N4148 TAPG
IC101	32119-101-380	TDA8341/N6
IC102	32119-101-240	TDA2556/V2
IC103	32119-101-250	TDA3803A/V2,V3
IC201	32119-501-020	TDA3505/V9
IC501	32119-110-007	TDA4650/V2
IC502	32119-110-006	TDA4660/V1
IC503	32119-101-650	TDA4565/V6
IC601	32119-102-730	AN5836
Q101	32139-301-090	2SC 388-A
Q102	32119-901-110	MC7812C
Q203	32137-301-550	KSC 2331-O(TAPG)
Q501	32137-301-510	KSC 2310-O(TAPG)
Q502	32137-301-510	KSC 2310-O(TAPG)
Q503	32139-301-080	KTC 388A
Q504	32157-210-000	BC548-C(TAPG)
Q505	32157-210-001	BC558-C(TAPG)
Q506	32157-210-000	BC548-C(TAPG)
Q601	32137-301-720	KSC 815-Y (TAPG)
Q602	32137-301-720	KSC 815-Y (TAPG)
Q603	32137-301-720	KSC 815-Y (TAPG)
RD01	32167-406-480	1N4148 TAPG
RD02	32167-406-480	1N4148 TAPG
RD03	32167-406-040	MTZ 3.6A
RD04	32167-406-480	1N4148 TAPG
RD06	32167-408-080	EQA02-06D/MTZ6.2B(TAPG)
RD07	32167-406-480	1N4148 TAPG
RD11	32167-406-480	1N4148 TAPG
RD20	32167-401-800	EQA02-06A/MTZ5.6B(TAPG)
RD21	32167-401-800	EQA02-06A/MTZ5.6B(TAPG)
RD22	32167-401-800	EQA02-06A/MTZ5.6B(TAPG)
RD23	32167-401-800	EQA02-06A/MTZ5.6B(TAPG)
RIC01	32109-110-014	MAB8461P/W203
RIC02	32119-101-710	SAB3035/C1
RIC03	32109-201-430	PCF8582 AP
RQ01	32137-301-720	KSC 815-Y (TAPG)
RQ02	32137-301-720	KSC 815-Y (TAPG)
RQ03	32137-301-720	KSC 815-Y (TAPG)
RQ06	32137-301-720	KSC 815-Y (TAPG)
RQ08	32137-401-530	KSA 539-Y(TAPG)
RQ09	32119-901-110	MC7812C
RQ10	32137-301-720	KSC 815-Y (TAPG)
RQ11	32137-301-720	KSC 815-Y (TAPG)
SD01	32167-406-480	1N4148 TAPG
SD02	32167-406-480	1N4148 TAPG
SD03	32167-406-480	1N4148 TAPG
SD04	32167-406-480	1N4148 TAPG
SD05	32167-406-480	1N4148 TAPG
SD06	32167-406-480	1N4148 TAPG
SD07	32167-406-480	1N4148 TAPG
SD08	32167-406-480	1N4148 TAPG
SD09	32167-406-480	1N4148 TAPG
SD10	32167-406-480	1N4148 TAPG
SD11	32167-406-480	1N4148 TAPG
SIC01	32109-301-890	CD4053BCN
SIC02	32109-301-900	CD4066BCN
SIC03	32109-301-890	CD4053BCN
SIC04	32109-301-900	CD4066BCN
SIC05	32119-101-010	TEA2014
SQ01	32137-301-720	KSC 815-Y (TAPG)
SQ02	32137-301-720	KSC 815-Y (TAPG)

Loc No	Supplier Part No.	Description
SQ03	32137-401-530	KSA 539-Y(TAPG)
SQ04	32137-301-720	KSC 815-Y (TAPG)
SQ05	32137-301-720	KSC 815-Y (TAPG)
SQ06	32137-301-720	KSC 815-Y (TAPG)
SQ07	32137-301-720	KSC 815-Y (TAPG)
SQ08	32137-301-720	KSC 815-Y (TAPG)
SQ13	32137-301-720	KSC 815-Y (TAPG)
TD01	32167-406-480	1N4148 TAPG
TD02	32167-406-480	1N4148 TAPG
TD03	32167-406-040	MTZ 3.6A
TD04	32167-406-040	MTZ 3.6A
TD05	32167-406-480	1N4148 TAPG
TD06	32167-406-480	1N4148 TAPG
TD07	32167-406-480	1N4148 TAPG
TD08	32167-406-480	1N4148 TAPG
TD09	32167-406-480	1N4148 TAPG
TD10	32167-406-480	1N4148 TAPG
TIC01	32109-101-380	MAB8461P/W115
TIC02	32119-101-690	SAA5231/V6
TIC03	32119-101-700	SAA5243P/E/M2
TIC04	32109-201-410	KM6264AP-10
TQ01	32137-301-720	KSC 815-Y (TAPG)
TQ02	32137-401-530	KSA 539-Y(TAPG)
TQ03	32137-301-720	KSC 815-Y (TAPG)
TQ04	32137-301-720	KSC 815-Y (TAPG)
TQ05	32137-301-720	KSC 815-Y (TAPG)
TQ06	32137-301-720	KSC 815-Y (TAPG)
TQ07	32137-301-720	KSC 815-Y (TAPG)
TQ08	32137-301-720	KSC 815-Y (TAPG)
TQ09	32137-401-530	KSA 539-Y(TAPG)
TQ10	32137-301-720	KSC 815-Y (TAPG)
	COILS	
L101	32429-014-020	1.3UH-K
L120	32709-024-310	38.9MHZ/0.17UH
L121	32427-803-410	8.2UH-M
L122	32427-805-450	12UH-K TAPG
L123	32709-024-320	38.9MHZ/0.36UH
L124	32427-803-130	10UH-K TAPG
L150	32709-024-270	5.5MHZ/5.74MHZ
L151	32709-024-270	5.5MHZ/5.74MHZ
L153	32709-024-240	35MHZ
L170	32709-024-250	54.68KHZ
L201	32709-024-350	72UH
L202	32709-024-260	4MHZ
L501	32427-805-330	5.6UH-M
L502	32427-803-410	8.2UH-M
L503	32427-805-500	33UH-K TAPG
L504	32709-024-300	4.33 MHZ(7CAN)
L508	32769-110-710	113CN-K5037BY
SL01	32427-904-750	4.7UH-K TAPG
TL01	32427-822-010	15UH-J TAPG
	MISCELLANEOUS	
CN01	33124-111-100	1P AUTO
CNA01	33345-110-310	67094-012(SEP)
CNA02	33347-114-810	YW025-04(AUTO)
CNA03	33347-108-310	67094-003(AUTO)
CNA04	33347-108-310	67094-003(AUTO)
CNA05	33347-108-310	67094-003(AUTO)
CNA06	33347-110-150	67094-008 (AUTO)
CNA07	33347-108-310	67094-003(AUTO)
CNA08	33347-108-140	67094-006 (AUTO)
CNA09	33347-108-180	67094-005 (AUTO)
CNP01	33054-833-009	P1/1015/500
CNPG01	33124-111-100	1P AUTO
JA01	33134-103-030	HXC-1510-01-300A
JA02	33334-104-910	JPJ0556-01-040
JA03	33334-105-080	8MM (WHT)
JA04	33329-100-150	TCS7549-01-201
RV01	33054-601-085	SR/1365/150
RZ01	34539-017-010	HC-18/U,4.000MHZ
RZ02	34539-017-010	HC-18/U,4.000MHZ
SPK	34209-169-460	06Q01BRA 10W 8
SW801	33529-138-090	ME5 70060-026
TU01	34519-990-090	ECC-2885PD(P)
TZ01	34537-001-005	6.0MHZ
TZ02	34539-071-060	HC-18/U,13.875MHZ
TZ03	34539-080-010	KBR-6.0M
Z101	34529-440-030	OFW G 3203
Z102	34529-460-010	TPS5.5MW
Z150	34529-439-810	SFE 5.5MC
Z151	34529-439-910	SFE 5.74MC
Z152	34529-439-810	SFE 5.5MC
Z153	34529-439-910	SFE 5.74MC
Z501	34539-070-210	HC-18/U,8.86723MHZ
	2 . A S S Y - P W B , C R T	
	*3D32-00009-030 CX5913W	
PWB	33004-141-651	245X245X1.6T-6Y <S.N.A>
	RESISTORS	
R506	31018-277-152	RD 1/4T 1.5K-J
R550	31018-277-102	RD 1/4T 1K-J

Loc No	Supplier Part No.	Description
R551	31018-277-132	RD 1/4T 1.3K-J
R553	31018-377-681	RD 1/2T 680-J
R555	31018-277-684	RD 1/4T 680K-J
R556	31018-277-102	RD 1/4T 1K-J
R557	31028-328-472	RC 1/2T 4.7K-K
R558	31018-277-680	RD 1/4T 68-J
R559	31018-277-102	RD 1/4T 1K-J
R560	31018-277-132	RD 1/4T 1.3K-J
R561	31049-101-473	RS 1P 47K-J
R562	31018-377-681	RD 1/2T 680-J
R563	31018-277-122	RD 1/4T 1.2K-J
R564	31018-277-684	RD 1/4T 680K-J
R565	31049-315-030	RS 2P 18K-J
R566	31028-328-472	RC 1/2T 4.7K-K
R568	31018-277-132	RD 1/4T 1.3K-J
R569	31049-101-473	RS 1P 47K-J
R570	31018-377-681	RD 1/2T 680-J
R571	31018-277-122	RD 1/4T 1.2K-J
R572	31018-277-684	RD 1/4T 680K-J
R573	31049-315-030	RS 2P 18K-J
R574	31028-328-472	RC 1/2T 4.7K-K
R575	31018-277-561	RD 1/4T 560-J
R578	31018-277-122	RD 1/4T 1.2K-J
R580	31059-003-010	RF 1P 4.3-J
R581	31049-315-030	RS 2P 18K-J
R582	31049-101-473	RS 1P 47K-J
R590	31018-277-106	RD 1/4T 10M-J
VR550	31018-277-680	RD 1/4T 68-J
VR551	31018-277-680	RD 1/4T 68-J
	CAPACITORS	
C551	31417-104-250	CK45 TAPG B 50V 471-K
C552	31417-104-050	CK45 TAPG B 50V 101-K
C553	31407-105-700	CC45 TAPG CH 50V 151-J
C554	31407-105-300	CC45 TAPG CH 50V 680-J
C555	31417-104-250	CK45 TAPG B 50V 471-K
C556	31407-101-360	CC45 TAPG SL 50V 101-J
C557	31407-105-700	CC45 TAPG CH 50V 151-J
C558	31417-104-250	CK45 TAPG B 50V 471-K
C559	31607-402-280	CE04W TAPG 50V 47u
C560	31609-403-460	CE04W 250V 2.2-VENT
C561	31418-767-331	CK45 B 2KV 331-K
C566	31407-105-700	CC45 TAPG CH 50V 151-J
C567	31607-401-480	CE04W TAPG 16V 220M-M-VE
C590	31609-403-460	CE04W 250V 2.2-VENT
	SEMICONDUCTORS	
D550	32167-406-480	1N4148 TAPG
D551	32167-406-480	1N4148 TAPG
D552	32167-201-070	1N4003 TAPG
D553	32167-406-480	1N4148 TAPG
D554	32167-406-480	1N4148 TAPG
D555	32167-201-070	1N4003 TAPG
D556	32167-406-480	1N4148 TAPG
D557	32167-406-480	1N4148 TAPG
D558	32167-201-070	1N4003 TAPG
D590	32167-201-180	M100J(TAPG)
Q550	32159-101-270	BF 871
Q551	32137-301-520	KSC 2310-Y(TAPG)
Q552	32159-101-260	BF 423
Q553	32159-101-270	BF 871
Q554	32137-301-520	KSC 2310-Y(TAPG)
Q555	32159-101-260	BF 423
Q556	32159-101-270	BF 871
Q557	32137-301-520	KSC 2310-Y(TAPG)
Q558	32159-101-260	BF 423
Q559	32137-401-530	KSA 539-Y(TAPG)
	MISCELLANEOUS	
CNT08	33345-108-140	67094-006(SEP)
CNT08	33058-017-016	S6XS6/F/400
CNT09	33050-101-851	Y4XY4/1185X2/500
CNT09	33347-114-820	YW025-04(AUTO,NO TUBE)
V999A	33359-063-620	HF-29.1A

3. ASSY-PWB, CONTROL

*3D33-00567D030 CX5913W(SKD)

PWB	33004-144-032	172X71X1.6T <S.N.A>
GR01	31018-277-220	RD 1/4T 22-J
GR02	31018-277-223	RD 1/4T 22K-J
GR03	31018-277-561	RD 1/4T 560-J
GR04	31018-277-561	RD 1/4T 560-J
GP01	31607-401-460	CE04W TAPG 16V 47M
RIC04	32109-401-370	SAA1064/N2
GD01	32167-406-090	MTZ 6.5B
GD02	32167-406-090	MTZ 6.5B
GD03	32167-406-090	MTZ 6.5B
PA01	32199-101-020	SG-05M
GLD03	32309-110-420	DL-25G/SL-425G
GLD04	32309-110-420	DL-25G/SL-425G
GLD02	32309-110-430	DS2 (DL-25R)/SL-425R
GLD05	32309-110-430	DS2 (DL-25R)/SL-425R

Loc No	Supplier Part No.	Description
CLD06	32309-110-430	DS2 (DL-25R)/SL-425R
CLD01	32309-201-080	ODR-204ALS
CNR02	33050-005-020	Y4/F/500
CNR03	33055-216-214	S3/2405/600
CNR01	33058-002-020	S3/F/500
CNR04	33058-012-024	S5/F/600
CNR05	33058-012-024	S5/F/600
SWA02	33529-130-410	KPT-1106
SWA03	33529-130-410	KPT-1106
SWA04	33529-130-410	KPT-1106
SWA05	33529-130-410	KPT-1106
SWA06	33529-130-410	KPT-1106
SWA07	33529-130-410	KPT-1106
SWA08	33529-130-410	KPT-1106
SWA01	33609-101-004	JTM-1105C/KPT-1105B
		4 . A S S Y - P W B , P O W E R
		*3D50-00002-020 CX5913W
SP207	33004-144-051	330X180X1.6T <S.N.A>
	RESISTORS	
R302	31018-377-561	RD 1/2T 560-J
R303	31018-277-182	RD 1/4T 1.8K-J
R304	31018-377-271	RD 1/2T 270-J
R305	31018-277-623	RD 1/4T 62K-J
R308	31018-277-392	RD 1/4T 3.9K-J
R309	31048-277-478	RM 1/4T 0.47-J
R310	31018-277-820	RD 1/4T 82-J
R312	31018-277-134	RD 1/4T 130K-J
R313	31018-277-562	RD 1/4T 5.6K-J
R314	31018-277-220	RD 1/4T 22-J
R315	31018-277-152	RD 1/4T 1.5K-J
R316	31018-277-102	RD 1/4T 1K-J
R321	31048-275-123	RM 1/4T 12K-F
R323	31047-251-053	RM 1/4T 10.5K-F
R327	31018-277-568	RD 1/4T 0.56-J
R329	31018-277-471	RD 1/4T 470-J
R330	31018-277-302	RD 1/4T 3K-J
R340	31018-277-474	RD 1/4T 470K-J
R400	31059-427-121	RF 1P 120-J
R401	31018-277-221	RD 1/4T 220-J
R402	31018-377-220	RD 1/2T 22-J
R403	31018-277-122	RD 1/4T 1.2K-J
R404	31018-277-222	RD 1/4T 2.2K-J

Loc No	Supplier Part No.	Description
R405	31018-277-184	RD 1/4T 180K-J
R406	31018-277-682	RD 1/4T 6.8K-J
R407	31018-277-333	RD 1/4T 33K-J
R408	31018-277-181	RD 1/4T 180-J
R409	31059-002-010	RF 1/2P 1-J
R411	31018-377-102	RD 1/2T 1K-J
R412	31049-311-059	RM 1/2P 120K-F
R413	31039-687-689	RE 7H 6.8-J
R414	31059-002-010	RF 1/2P 1-J
R415	31059-004-010	RF 2P 0.47-K
R416	31018-277-684	RD 1/4T 680K-J
R420	31018-277-333	RD 1/4T 33K-J
R421	31018-277-393	RD 1/4T 39K-J
R423	31046-477-102	RS 1T 1K-J
R431	31018-277-220	RD 1/4T 22-J
R650	31018-277-122	RD 1/4T 1.2K-J
R651	31018-377-103	RD 1/2T 10K-J
R652	31018-277-103	RD 1/4T 10K-J
R653	31018-277-564	RD 1/4T 560K-J
R654	31018-377-122	RD 1/2T 1.2K-J
R655	31018-277-474	RD 1/4T 470K-J
R660	31018-277-474	RD 1/4T 470K-J
R661	31018-277-829	RD1/4T 8.2-J
R662	31018-277-829	RD1/4T 8.2-J
R801	31039-687-569	RW 7H 5.6-J
R802	31049-427-068	RS 1P 0.68-J
R803	31018-377-270	RD 1/2T 27-J
R804	31039-586-390	RW 5J 39-J
R805	31049-315-101	RS 2P 100-J
R806	31018-277-104	RD 1/4T 100K-J
R808	31018-277-153	RD 1/4T 15K-J
R809	31018-277-122	RD 1/4T 1.2K-J
R810	31018-277-103	RD 1/4T 10K-J
R811	31018-277-221	RD 1/4T 220-J
R812	31028-378-335	RC 1/2T 3.3M-K
R814	31046-577-272	RS 2T 2.7K-J
R815	31028-328-475	RC 1/2P 4.7M-K
R816	31059-002-130	RF 1/2P 0.47-K
R817	31059-004-010	RF 2P 0.47-K
R818	31046-567-243	RS 2T 24K-J(AUTO)
R819	31049-313-090	RS 1P 47-J
R820	31049-101-260	RS 1P 68-J
R821	31049-103-333	RS 2P 33K-J
R823	31059-003-100	RF 1P 1-K
R824	31039-527-249	RW 5J 2.4-J
R825	31049-103-902	RS 2P 47K-J
R826	31039-527-249	RW 5J 2.4-J
R830	31049-427-274	RS 1P 270K-J
R831	31049-427-274	RS 1P 270K-J

Loc No	Supplier Part No.	Description
	VARIABLE RESISTORS	
VR301	31249-128-009	EVN-DJA A03 B250K
VR304	31249-128-004	EVN-DJA A03 B1K
VR305	31249-128-010	EVN-DJA A03 B100K
VR401	31249-128-005	EVN-DJA A03 B5K
VR402	31249-128-008	EVN-DJA A03 B50K
VR801	31249-128-005	EVN-DJA A03 B5K
	CAPACITORS	
C301	31607-402-100	CE04W TAPG 35V 100M-M-VE
C302	31507-121-140	CQ921M TAPG 100V 0.01M-J
C305	31507-127-024	ECQ-V1H 224J-F3
C306	31607-402-100	CE04W TAPG 35V 100M-M-VE
C307	31607-402-590	CE04W TAPG 50V 4.7U-M(T.
C308	31609-401-740	CE04W 25V 2200M.VENT
C309	31417-109-140	CK45 TAPG F 50V 103-Z
C310	31507-121-110	CQ921M TAPG 100V 0.0056M
C311	31519-101-110	DSR 50V 0.22U-J
C312	31407-106-760	CC45 TAPG RH 50V 151-J
C313	31607-402-220	CE04W TAPG 50V 2.2M
C314	31607-402-070	CE04W TAPG 35V 22M
C315	31507-121-260	CQ921M TAPG 100V 0.1U-J
C316	31607-402-250	CE04W TAPG 50V 10M
C317	31609-402-490	CE04W 35V 2200M
C319	31507-121-260	CQ921M TAPG 100V 0.1U-J
C322	31507-121-430	CQ921M TAPG 100V 0.0047-
C333	31607-402-250	CE04W TAPG 50V 10M
C401	31417-104-270	CK45 TAPG B 50V 681-K
C403	31507-121-150	CQ921M TAPG 100V 0.015M-
C404	31418-767-102	CK45 B 2KV 102-K
C405	31418-767-331	CK45 B 2KV 331-K
C406	31519-338-112	CFS922M 1600V 0.0082M-J
C407	31509-337-090	CQ922M 400V 0.022-J
C408	31609-403-500	CE04W 250V 22M
C409	31609-401-740	CE04W 25V 2200M.VENT
C410	31609-403-070	CE04W 100V 68U
C411	31519-391-000	CFS 922M 400V 364-J
C412	31609-402-130	CE04W 35V 470M VENT SNAP
C413	31509-337-900	CQ922M 400V 0.1M-K
C414	31609-803-930	CE04W 250V 2.2M
C415	31519-002-020	CFS 922M 400V 824-J
C418	31607-402-480	CE04W TAPG 50V 47-W(+20-
C419	31507-121-430	CQ921M TAPG 100V 0.0047-
C421	31609-401-510	CE04W 16V 1000M VENT SNA
C423	31507-121-260	CQ921M TAPG 100V 0.1U-J
C424	31519-101-100	DSR 50V 0.0027 U-J
C425	31607-401-460	CE04W TAPG 16V 47M
C426	31507-121-180	CQ921M TAPG 100V 0.022M-
C433	31417-104-220	CK45 TAPG B 50V 221-K
C434	31417-109-140	CK45 TAPG F 50V 103-Z
C651	31507-121-180	CQ921M TAPG 100V 0.022M-
C652	31609-402-490	CE04W 35V 2200M
C653	31607-402-070	CE04W TAPG 35V 22M
C656	31507-121-180	CQ921M TAPG 100V 0.022M-
C657	31609-402-490	CE04W 35V 2200M
C801	31469-504-050	ECK-DNS 222MEX
C802	31469-504-050	ECK-DNS 222MEX
C803	31469-504-050	ECK-DNS 222MEX
C804	31469-504-050	ECK-DNS 222MEX
C805	31569-513-683	XE104.250V 0.1UF
C806	31607-402-100	CE04W TAPG 35V 100M-M-VE
C807	31609-964-151	CE04W 400V 150U
C808	31607-402-100	CE04W TAPG 35V 100M-M-VE
C809	31509-337-770	CQ922M 400V 0.0082-J
C810	31509-337-770	CQ922M 400V 0.0082-J
C811	31607-402-210	CE04W TAPG 50V 1M
C812	31607-401-470	CE04W TAPG 16V 100M VENT
C813	31609-401-740	CE04W 25V 2200M.VENT
C814	31509-391-090	CQ922M 1600V 0.0022-J
C815	31607-401-710	CED4W TAPG 25V 470M-M
C816	31407-105-700	CC45 TAPG CH 50V 151-J
C817	31469-504-060	ECK-DNS472MEX/E400V 472(
C818	31469-504-060	ECK-DNS472MEX/E400V 472(
C819	31607-401-710	CED4W TAPG 25V 470M-M
C820	31607-401-700	CE04W TAPG 25V 330M-M(SG
C821	31607-401-140	CE04W TAPG 6.3V 1000U-M
C822	31419-901-180	CK45 B 2KV 271-K
C823	31607-402-250	CE04W TAPG 50V 10M
C824	31418-780-103	CK45 E 2KV 103-P
C825	31419-901-180	CK45 B 2KV 271-K
C826	31419-106-250	CK45 B 500V 103-K
C827	31417-109-140	CK45 TAPG F 50V 103-Z
C828	31607-403-170	CE04W TAPG 160V 1M
C829	31419-901-180	CK45 B 2KV 271-K
C830	31607-401-500	CE04W TAPG 16V 470M-M(SG
C831	31609-403-420	CE04W 200V 220M
C832	31609-402-490	CE04W 35V 2200M
C833	31419-901-180	CK45 B 2KV 271-K
C841	31569-204-190	250V 0.47M/KNB 1530
C842	31569-204-190	250V 0.47M/KNB 1530
C843	31569-204-190	250V 0.47M/KNB 1530
C844	31419-901-410	CK45 B 2KV 681-K
C845	31609-401-740	CE04W 25V 2200M.VENT
	SEMICONDUCTORS	
D301	32167-218-150	RU-2V(TAPG)
D302	32167-406-480	1N4148 TAPG

Loc No	Supplier Part No.	Description
D401	32167-201-170	TVR10G(TAPG)
D402	32167-201-190	RGP15G(TAPG)
D403	32167-201-170	TVR10G(TAPG)
D404	32167-501-030	BYW96D/BYT77
D405	32169-101-210	BY228/(TFK)
D406	32167-201-070	1N4003 TAPG
D650	32167-201-070	1N4003 TAPG
D651	32167-201-070	1N4003 TAPG
D801	32167-208-550	ERC 24-06 TAPG
D802	32167-208-550	ERC 24-06 TAPG
D803	32167-208-550	ERC 24-06 TAPG
D804	32167-208-550	ERC 24-06 TAPG
D805	32167-208-550	ERC 24-06 TAPG
D807	32167-208-550	ERC 24-06 TAPG
D808	32167-408-080	EQA02-06D/MTZ6.2B(TAPG)
D809	32167-208-550	ERC 24-06 TAPG
D810	32119-101-360	KA 33V(TAPG)
D811	32167-208-550	ERC 24-06 TAPG
D812	32167-501-040	GI824
D814	32169-201-230	RU4AM
D815	32167-208-550	ERC 24-06 TAPG
D825	32167-201-070	1N4003 TAPG
D830	32167-208-550	ERC 24-06 TAPG
IC301	32119-110-016	TDA3654
IC302	32119-101-460	TDA2579A/N8
IC402	32119-110-001	TDA8145
IC602	32119-201-350	TDA1521/4
IC801	32119-401-010	TDA4601
IC803	32119-901-110	MC7812C
IC902	32119-401-110	MC7805C
P801	32189-609-330	PTH451C02BG360N270
P802	32189-102-030	P2462-J29/J29-P190-A20
Q401	32159-210-009	BU508AF1
Q402	32149-301-020	KSC 2073
Q801	32159-210-004	2SC3552 YC
Q802	32149-401-270	KSD 288-Y
	COILS	
L301	32429-040-000	8.4MH
L401	32427-805-110	1UH-M
L404	32449-412-602	1MH
L405	32449-730-001	22UH
L406	32429-039-190	2.2MH
L408	32429-040-001	5.6MH
L601	32429-040-002	20UH/2.0A-K
L602	32429-040-002	20UH/2.0A-K
L801	32429-633-090	39MHX2(U)
L802	32429-903-610	6MH
L803	32429-226-160	4.7UH-K

Loc No	Supplier Part No.	Description
T401	32849-020-010	50MH,K-16
T444	32859-200-004	FCR-25A003
T801	32899-002-407	P:160-260 S:155/17/13/-1
	MISCELLANEOUS	
CN401	33347-114-820	YW025-04(AUTO,NO TUBE)
CN44	33124-205-007	4P 6-12.5-14MM
CN801	33124-205-003	2P 10MM
CN802	33124-205-006	4P 8-8-10MM
CN803	33124-205-003	2P 10MM
CN904	33347-114-820	YW025-04(AUTO,NO TUBE)
CNP01	33345-110-310	67094-012(SEP)
CNP01	33058-023-016	S12XS12/F/400
CNP03	33347-108-310	67094-003(AUTO)
CNP03	33058-100-593	S3XS3/2405/300
CNPG1	33124-111-100	1P AUTO
F801	33167-001-001	PFC 5000-0202
F801	34709-084-730	FST 250V 3.15A 20MM SEMK
L402	34047-019-060	3.5X6X1.0
L403	34047-019-060	3.5X6X1.0
L804	34047-019-060	3.5X6X1.0
L806	34047-019-060	3.5X6X1.0
P-COR	33053-816-584	KP-419J/LTCE-2F/8FT-HOU
RL801	34729-002-010	JC 2A DC 12V
SL-SW	33519-106-008	KSA-2273
SW801	33529-138-090	ME5 70060-026

5 . A S S Y - C R T

V999	32019-300-102	A59EAK01X01
D-COI	32479-029-301	29RT85L1500/L1500(D)

Loc No	Supplier Part No.	Description
		6 . A S S Y - T R A N S M I T T E R
		*3F14-00022-020 TM22,RM104,50,BLK,NO
PWB	33004-441-251	158X54X1.0T <S.N.A>
XR01	31018-277-279	RD 1/4T 2.7-J
XR02	31018-277-279	RD 1/4T 2.7-J
XC02	31407-105-280	CC45 TAPG CH 50V 560-J
XC01	31409-105-110	CC45 CH 50V 120-J
XC03	31607-401-460	CE04W TAPG 16V 47M
XIC01	32109-201-350	SAA3004P
XQ01	32137-301-720	KSC 815-Y (TAPG)
XD01	32167-406-480	1N4148 TAPG
XD02	32167-406-480	1N4148 TAPG
XD03	32309-101-090	CL-2(F)/SSIR-5D
XZ01	34539-050-010	CSB455EBL/KBR455BKTLR

25P88MT
01
33004-144-021

IC501 TDA4650 (PAL/SECAM DECODER)
IC502 TDA4660 (1H-DELAY)
IC503 TDA4565 (CTI/Y-DELAY)
IC201 TDA3505 (VIDEO/MATRIX/RGB OUTPUT)
IC102 TD2556 (SIF)
IC103 TDA3803A (SOUND DECODER)
IC601 AN5836 (SOUND CONTROL)
TIC01 PCF84C81/CTV972 1.1 MAB8461P W115 (TTX,µ-COM)
TIC02 SAA5231 (VIP2)
TIC03 SAA5243P (CCP)
TIC04 KM6264AL (S-RAM)
RIC03 PCF8582 (EEPROM)
VR150 SEP-ADJ
VR151 STEREO IDENT
VR152 DUAL IDENT
VR201 HI-BLUE
VR202 HI-RED
VR501
VR502
L508 BELL FILTER
CNA04 I G II
CNA03
CNA09
CNP01
CNP02
TP-A
TP-B
TP-G2
TP-G3
TP-G4
TP-L
TP-R
TP-P
TP-PS
TP-PD
TP-SC1
TP-SC2
TP-OSC
TP-15
TP-50
TP-51
TP-61
TP-38
5V
SDA
SCL
H:FLOF (L:LIST)
H:LIST (L:FLOF)
H:ENG (L:GER)
LE
CLK
DATA
GND
R
G
B
Z501
Z151
Z152
Z153
D201
D202
D503
D602
D603
Q501
Q502
Q503
Q504
Q505
Q506
Q601
Q602
Q603
TQ01
TQ02
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TQ08 RH
TQ09
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C201 C202 C204 C205 C206 C207 C208 C209 C222
C601 C602 C603 C604 C605 C606 C607 C608 C609 C610 C611 C612 C613 C614 C615 C616 C617 C618 C619 C620 C621 C622 C623 C624 C625 C626 C627 C628 C629 C630 C631 C632 C633
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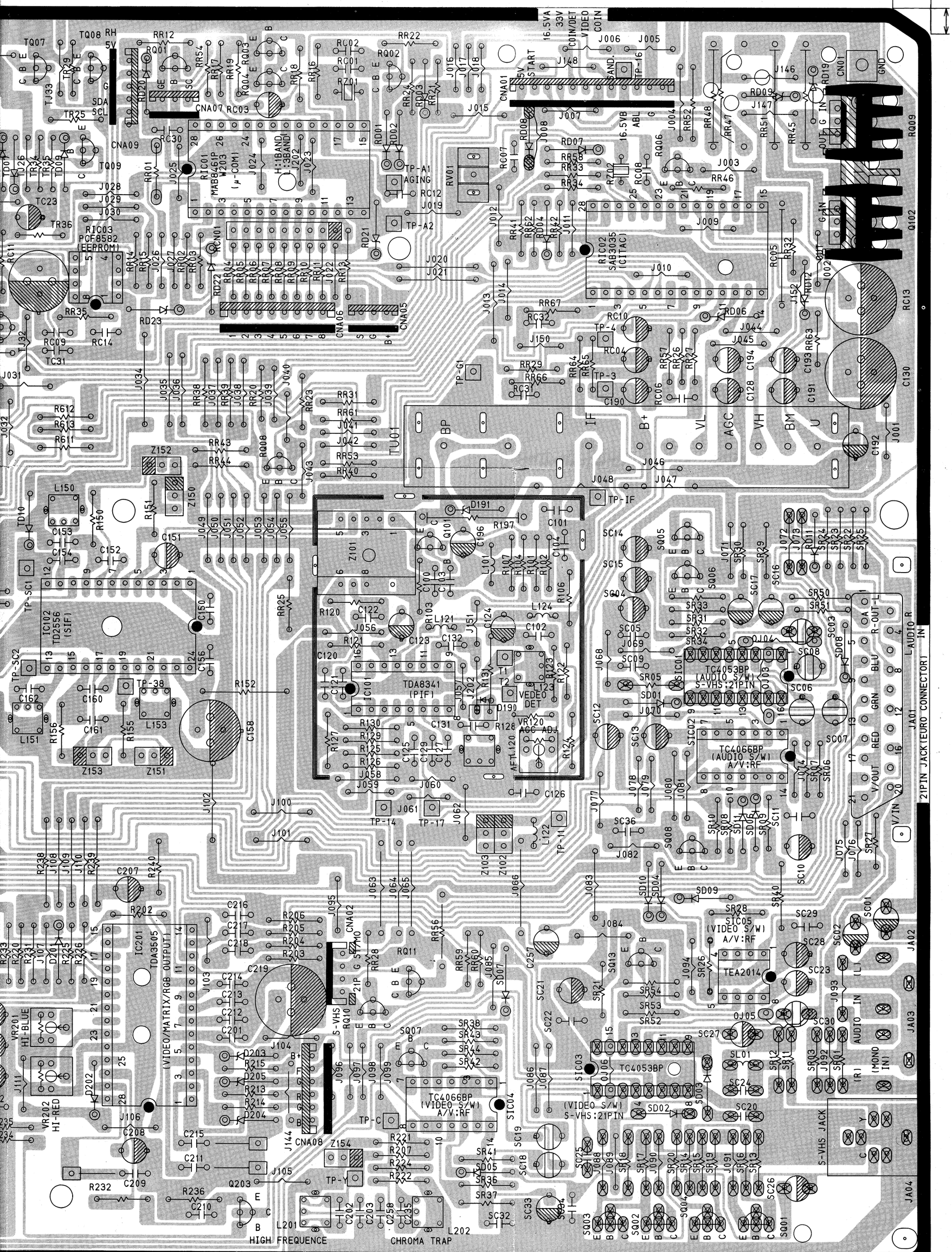
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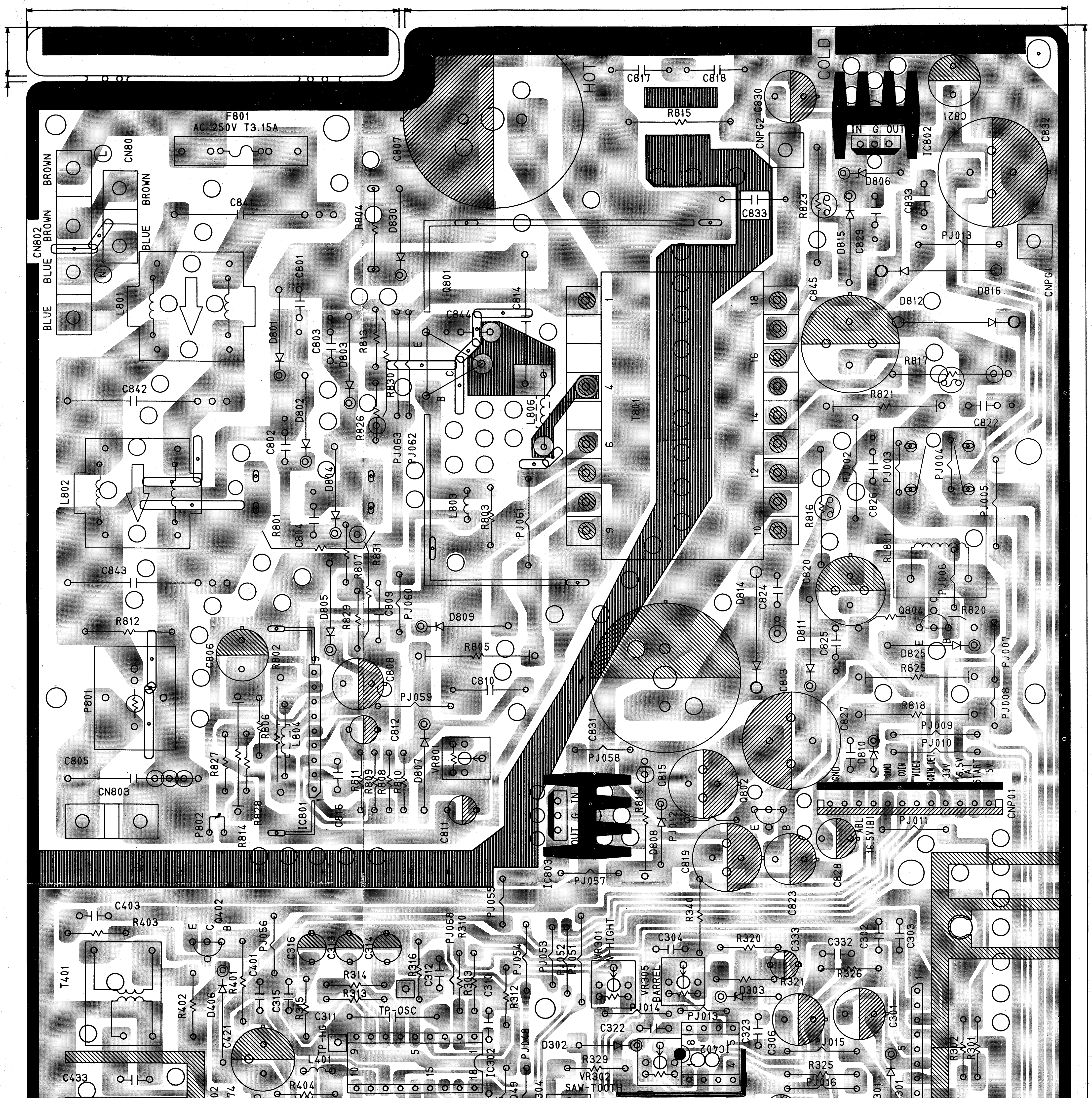
TQ08 RH 5V
SDA
SCL
CNA07
CNA09
TQ09
TC23
TR36
RIC03 PCF8582 (EEPROM)
RIC01 MAB8461P W203 (μ-COM)
H:1BAND, L:3BAND
TP-A1 AGING
TP-A2
RV01
RIC02 SAB3035 (CITAC)
CNA01
5V START
16.5VA 33V
COIN/DET
VIDEO COIN
SAND.
TP-16
16.5VB ABL
GND
OUT G IN
G-IN
OUT
CNA06
CNA05
TU01
BP
IF
B+
VL
AGC
VH
BM
U
TP-G1
TP-4
TP-3
TP-IF
TP-SC1
TP-SC2
IC102 TD2556 (SIF)
TP-38
TDA8341 (PIF)
VEDEO DET
AFT L120
VR120 AGC ADJ
TP-C
TP-Y
CNA08
Z154
HIGH FREQUENCE
CHROMA TRAP
L201
L202
IC201 TDA3505 (VIDEO/MATRIX/RGB OUTPUT)
CNA02
S-VHS
21P
RQ11
SIC04 TC4066BP (VIDEO S/W) A/V:RF
SIC03 TC4053BP (VIDEO S/W) S-VHS:2IPIN
SIC02 TC4066BP (AUDIO S/W) A/V:RF
SIC01 TC4053BP (AUDIO S/W) S-VHS:2IPIN
SIC05 (VIDEO S/W) A/V:RF
TEA2014
S-VHS JACK
AUDIO IN (MONO IN)
(R)
(L)
L-OUT
R-OUT
GRN
BLU
RED
V/OUT
V/IN
2IPIN JACK(EURO CONNECTOR) IN
LAUDIO R
JA01
JA02
JA03
JA04
Q102



F801
AC 250V T3.15A
CN801
CN802
BROWN
BROWN
BROWN
BLUE
BLUE
BLUE
L801
L802
C841
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C843
C805
CN803
R812
P801
P802
C807
HOT
COLD
C817
C818
R815
CNPG2
C830
IN G OUT
IC802
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C803
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R813
R830
D802
C802
R826
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PJ062
D804
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C
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L806
T801
L803
R803
PJ061
R801
C804
R807
R831
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R829
C809
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C806
R802
C808
PJ059
L804
R806
C812
VR801
D807
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R828
R814
IC801
C816
R811
R809
R808
R810
C811
C831
PJ058
C815
R819
IC803
D808
PJ012
PJ057
PJ055
D814
C824
D811
C825
C813
C820
C819
C823
C828
Q802
C827
D810
R816
C826
PJ002
PJ003
PJ004
PJ005
RL801
PJ006
Q804
R820
D825
R825
PJ007
R818
PJ008
PJ009
PJ010
GND
SAND
COIN
VIDEO
COIN DET.
33V
16.5V (A)
START
5V
CNP01
PJ011
ABL
16.5V(B)
C403
R403
Q402
T401
PJ056
C316
C313
C314
C401
R401
D406
R402
C315
R315
R314
R313
C311
TP-OSC
TP-HG
L401
C421
C433
R404
R316
C312
PJ068
R310
R303
C310
R312
PJ054
PJ053
PJ052
PJ051
PJ048
IC302
VR301
V-HIGHT
VR305
BARREL
PJ014
C304
PJ013
R340
R320
C333
R321
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C332
C302
C303
R326
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R325
PJ016
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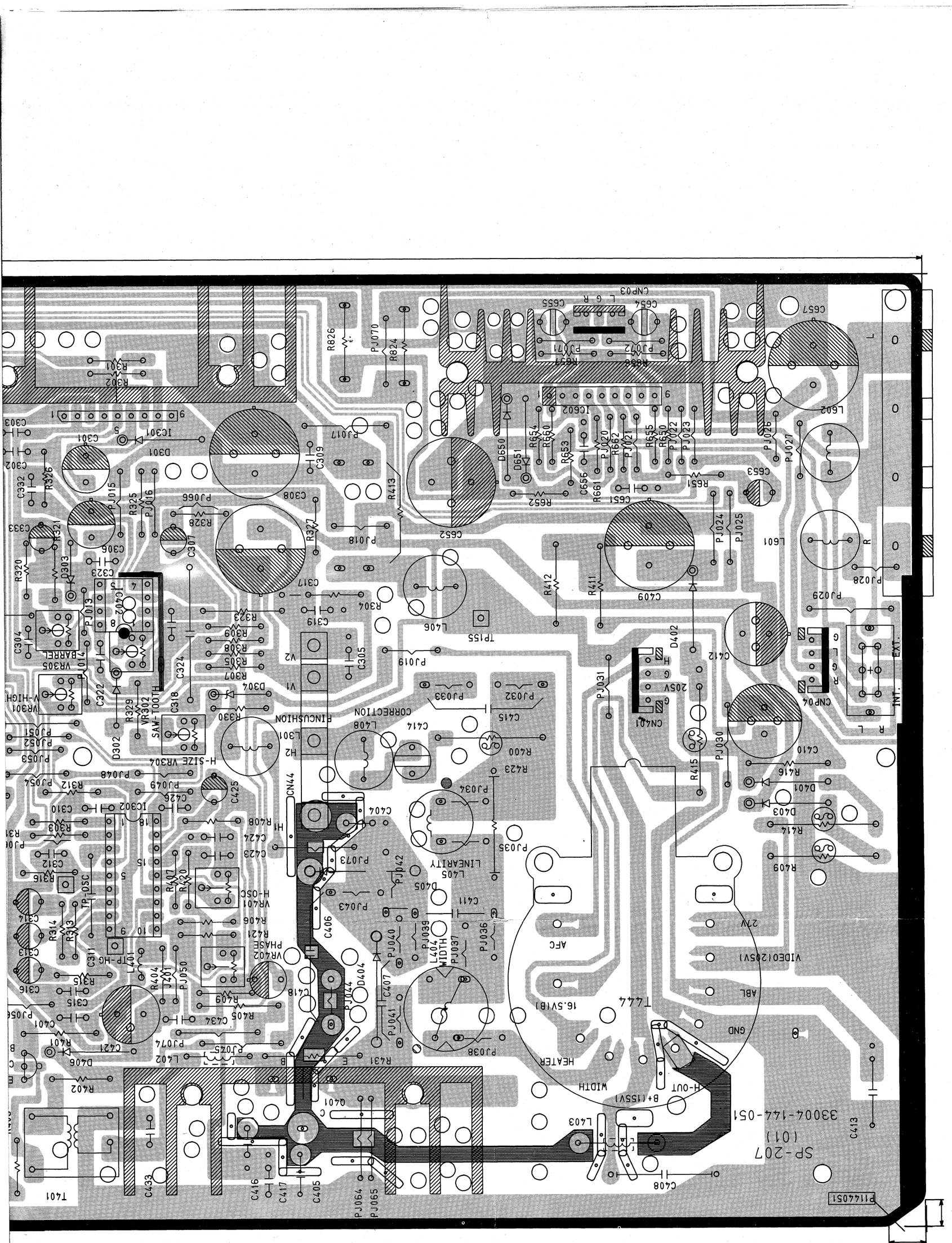
R302
R301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SP-207
P1144051
H-OUT
B+(155V)
WIDTH
HEATER
GND
ABL
16.5V(B)
T444
AFC
VIDEO(205V)
27V
LINEARITY
WIDTH
CORRECTION
FINCUSHION
H-SIZE VR304
H-OSC
V-HIGHT
BARREL
SAW-TOOTH
CNP03
CNP04
CN401
CN44
L 6 R
EXT.
INT.
205V
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L601
L602
L603
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L408
TP155
IC602
IC301
IC302
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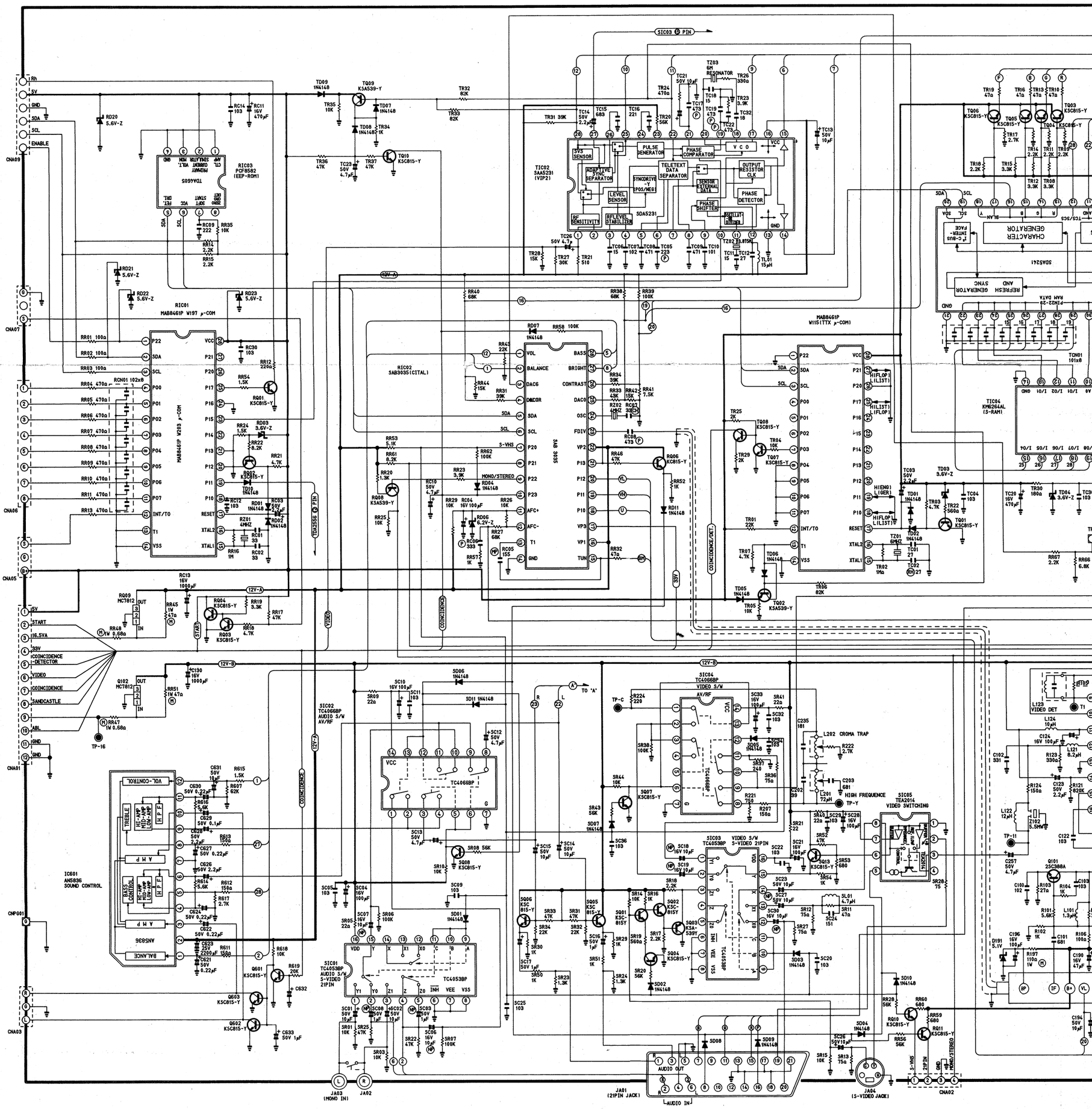
C411
C408
C405
C406
C407
C308
C309
C317
C319
C305
C307
C306
C323
C324
C322
C318
C425
C426
C424
C423
C421
C418
C434
C433
C416
C417
C401
C402
C403
C404
C301
C302
C303
C332
C304
C310
C312
C314
C313
C316
C315
C311
R826
R824
R827
R828
R829
R830
R831
R832
R833
R834
R835
R836
R837
R838
R839
R840
R841
R842
R843
R844
R845
R846
R847
R848
R849
R850
R851
R852
R853
R854
R855
R856
R857
R858
R859
R860
R861
R862
R863
R864
R865
R866

SCHEMATIC DIAGRAM

MODEL NAME:CX5913W



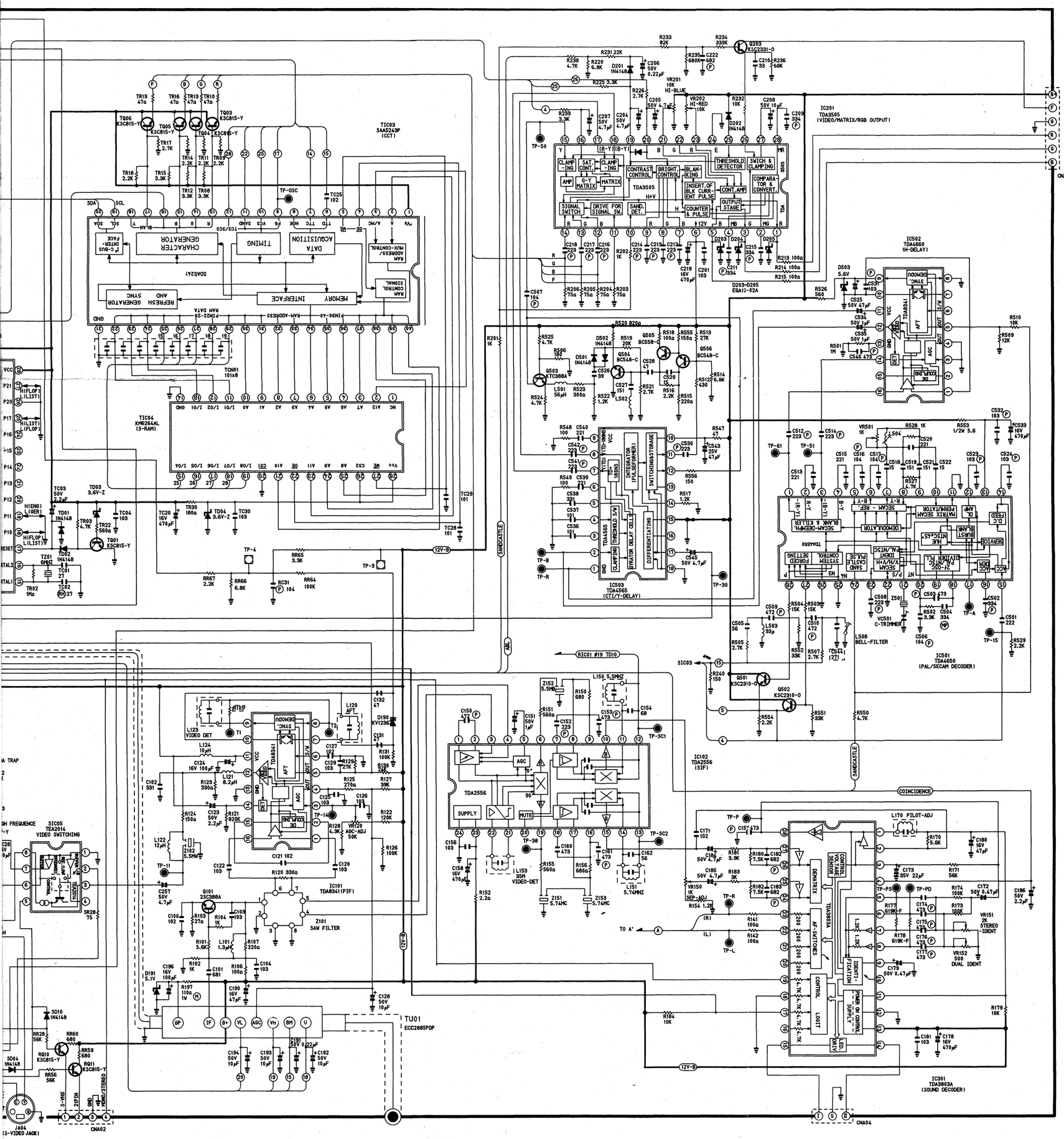
TP-11	TP-15	TP-R	PIN 15 OF IC201	TP-B	PIN 1 OF IC201	PIN 17 OF IC302	TP-P
2.3V p-p(H)	390mV p-p(H)	1.05V p-p(H)	550mV p-p(H)	1.33V p-p(H)	2.6V p-p(H)	12.0V p-p(H)	2.6V p-p(H)
TP-30	PIN V2 OF DY	TS-P5	TP-PD	PIN 3 OF IC201	PIN 2 OF IC201	PIN 15 OF IC302	PIN 11 OF IC501
1.0mV p-p(H)	40V p-p(H)	5.8V p-p(H)	5.0V p-p(H)	3.0V p-p(H)	2.8V p-p(H)	3.7V p-p(H)	1.3V p-p(H)

CAPACITOR	
TYPE	MARK
Ceramic	No Mark
Polyester	P
Tantalium	T
Metal Polyestor	MP
Polypropylene	P.P
Polyester Polypro	DSR
Chemical Electrolytic	⊣+⊢
Chemical Non-Polar	⊣⊢

RESISTOR	
TYPE	MARK
Carbon Composition	C
Oxide Metal Film	M
Metal Film	RM
Cement	R-C
Variable Resistor	⊣↗⊢
Positive Resistor	⊣↗⊢

OBSERVA

1 Voltage voltage
2 Voltage
3 The sch
4 All wav capacit
5 Check F best pi
6 Wavefor



RESISTOR	
TYPE	MARK
Carbon Composition	C
Oxide Metal Film	M
Metal Film	RM
Cement	R-C
Variable Resistor	
Positive Resistor	

OBSERVATION OF VOLTAGES AND WAVEFORMS

1 Voltages read with "VTVM" from point shown to chassis ground, line voltage 220/240V colour bar signal.
2 Voltages reading may vary ±20%.
3 The schematic shown is representative only.
4 All wavefroms are taken using a wide band oscilloscope and a low capacity probe.
5 Check FINE TUNING,AGC,BRIGHTNESS,CONTRAST,and COLOUR controls for best picture.
6 Waveforms are taken using a standard colour bar signal.

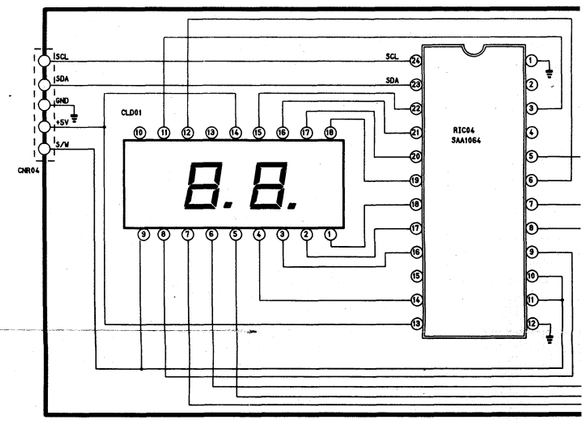
EXPRESSION

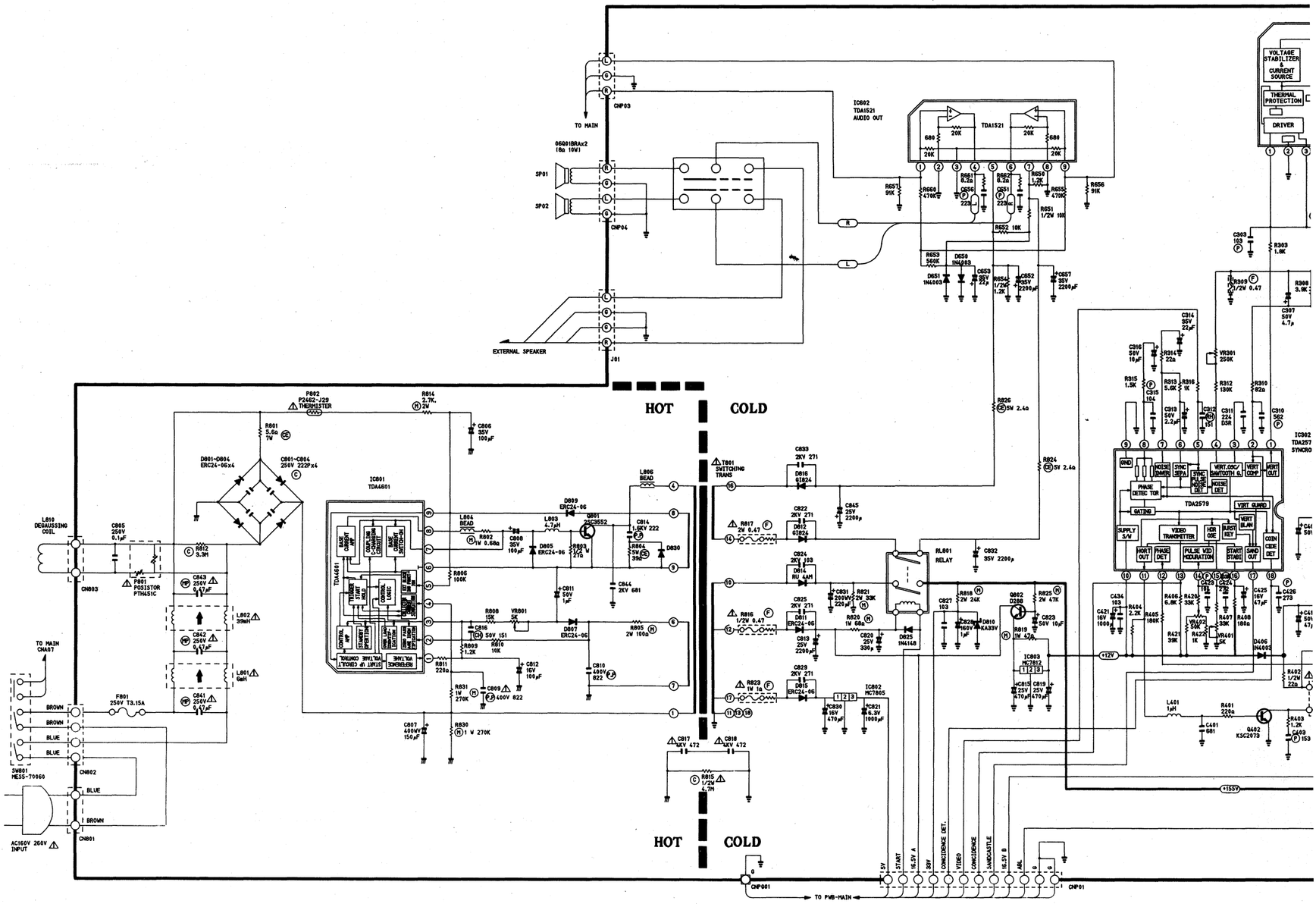
1 Resistance is shown ohm K=1,000 M=1,000,000.
2 Unless otherwise noted in schematic all capacitor values less than 1 are expressed in mfd,the values more than 1 in pF.
3 Unless otherwise noted in schematic all inductor values are expressed in uH,and the values less than 1 in mH.

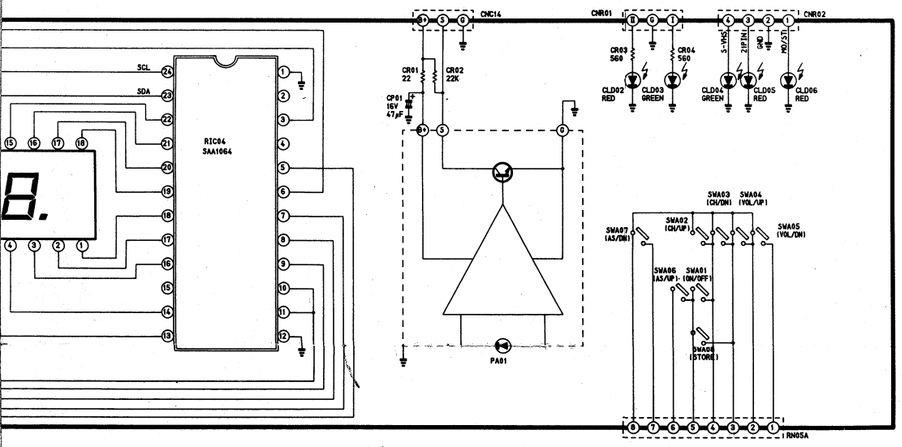
NOTE
The circuits are subject to change without notice to improve the picture quality.

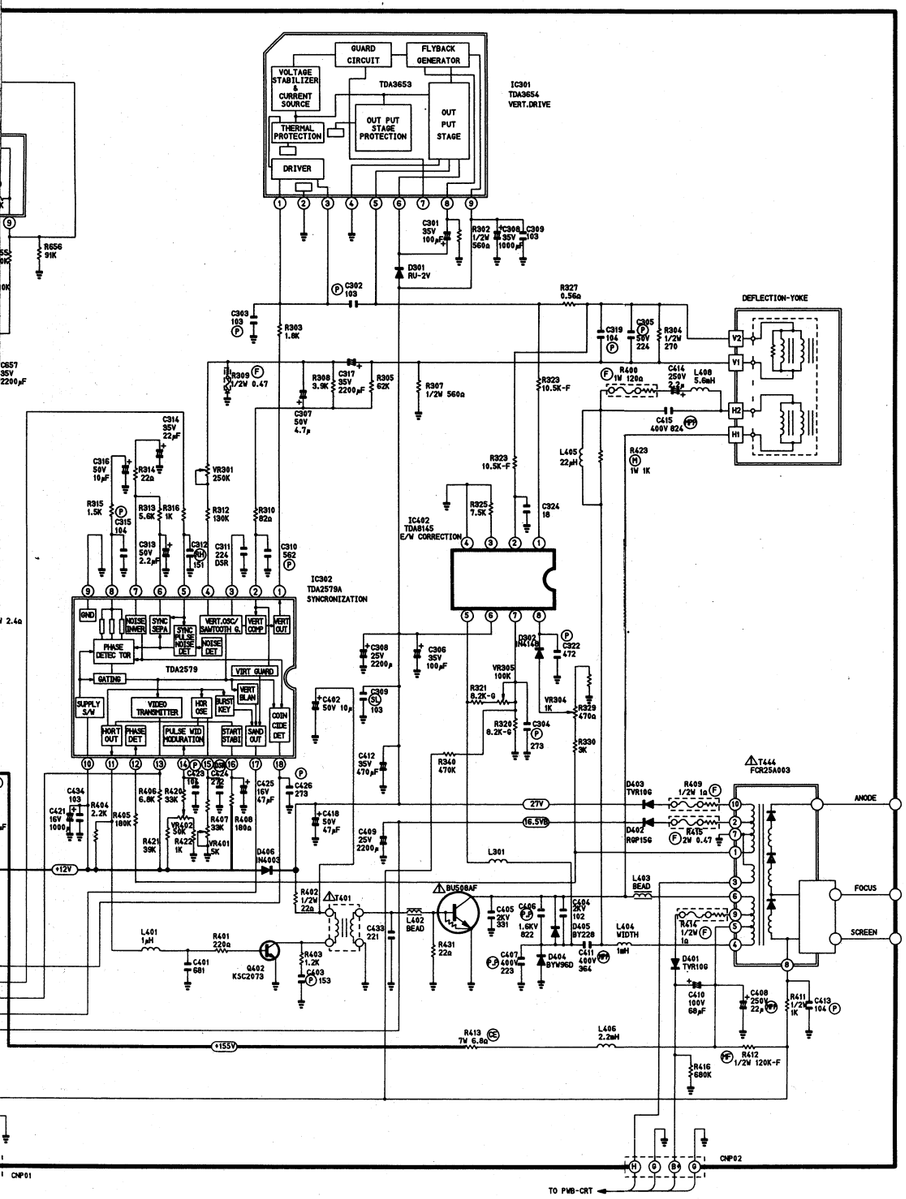
SCHEMATIC DIAGRAM

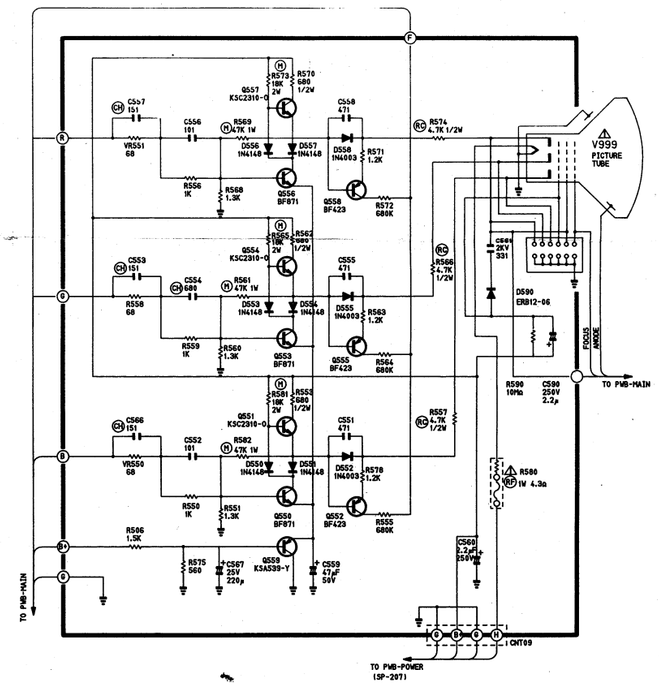
MODEL NAME : CX5913W.P

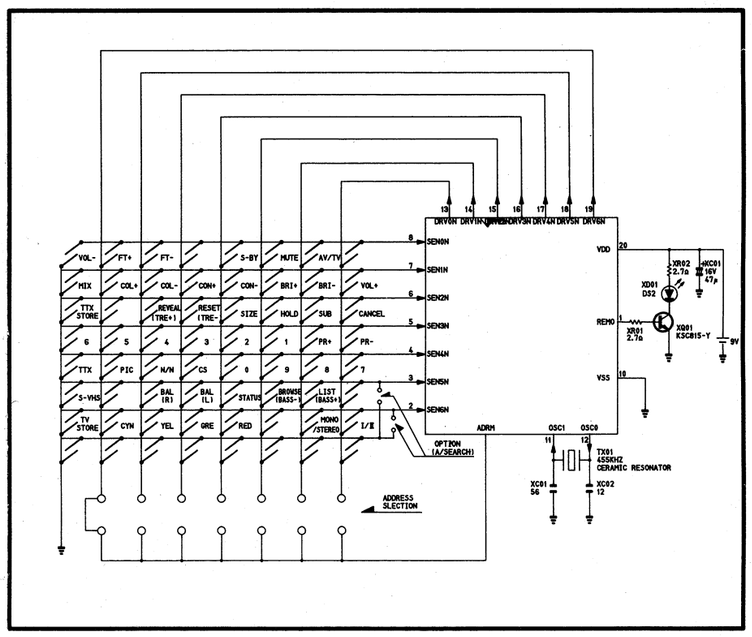





CNC14
CNR01
CNR02
SCL
SDA
RIC84
SAA1064
CR01 22
CR02 22K
CP01 16V 47μF
CR03 560
CR04 560
CLD02 RED
CLD03 GREEN
CLD04 GREEN
CLD05 RED
CLD06 RED
S-VHS
ZIP/FM
GND
MOUSE
PA01
SWA03 (CH/DN)
SWA04 (VOL/UP)
SWA02 (CH/UP)
SWA07 (AS/DN)
SWA05 (VOL/DN)
SWA06 (AS/UP)
SWA01 (ON/OFF)
SWA08 (STORE)
RN05A


IC301
TDA3654
VERT.DRIVE
GUARD CIRCUIT
FLYBACK GENERATOR
VOLTAGE STABILIZER & CURRENT SOURCE
TDA3653
THERMAL PROTECTION
OUT PUT STAGE PROTECTION
OUT PUT STAGE
DRIVER
D301 RU-2V
DEFLECTION-YOKE
IC402 TDA8145 E/W CORRECTION
IC302 TDA2579A SYNCRONIZATION
TDA2579
NOISE INVERT
SYNC SEPA
SYNC PULSE NOISE DET
VERT.OSC/ SAWTOOTH G.
VERT COMP
VERT OUT
PHASE DETECTOR
GATING
VIRT GUARD
SUPPLY S/W
VIDEO TRANSMITTER
HOR OSC
BURST KEY
VERT BLAN
COIN CIDE DET
HORT OUT
PHASE DET
PULSE WID MODURATION
START/ STABI
SAND OUT
T444 FCR25A003
ANODE
FOCUS
SCREEN
D403 TVR10G
D402 RGP15G
D401 TVR10G
Q402 K3C2073
BU508AF
D404 BYW96D
D405 BY228
L301
L401 1μH
L402 BEAD
L403 BEAD
L404 WIDTH 1mH
L405 22μH
L406 2.2mH
Y401
+27V
+16.5V
+12V
+155V
TO PWB-CRT
CNP01
CNP02


Q557 K3C2310-O
Q554 K3C2310-O
Q551 K3C2310-O
Q556 BF871
Q553 BF871
Q550 BF871
Q558 BF423
Q555 BF423
Q552 BF423
Q559 K5A539-Y
V999 PICTURE TUBE
DS90 ERB12-06
FOCUS ANODE
TO PWB-MAIN
TO PWB-POWER (SP-207)
CNT09


VOL- FT+ FT- S-BY MUTE AV/TV
MIX COL+ COL- CON+ CON- BRI+ BRI- VOL+
TTX STORE REVEAL (TRE+) RESET (TRE-) SIZE HOLD SUB CANCEL
6 5 4 3 2 1 PR+ PR-
TTX P/C M/N CS 0 9 8 7
S-VHS BAL (R) BAL (L) STATUS BROWSE (BASS-) LIST (BASS+)
TV STORE CYN YEL GRE RED MONO /STEREO I/E
SEN0N SEN1N SEN2N SEN3N SEN4N SEN5N SEN6N
DRY0N DRY1N DRY2N DRY3N DRY4N DRY5N DRY6N
VDD VSS REM0
ADR1 OSC1 OSC0
OPTION (A/SEARCH)
ADDRESS SLECTION
XR02 2.7Ω
XR01 2.7Ω
XD01 DS2
XQ01 K5C815-Y
9V
TX01 4500KHZ CERAMIC RESONATOR
XC01 56
XC02 12